The Effect of Organizational Citizenship Behavior (OCB), Total Quality Management (TQM), Technology Leadership and Service Quality on the Performance of Private Universities in Surabaya

Muhammad Anang Firmansyah¹, Budiman Christiananta², Lena Ellitan³

¹ Faculty of Economics, Merdeka University, Surabaya, INDONESIA.
², ³ Faculty of Business, Widya Mandala Chatolic University, Surabaya, INDONESIA.

1 anangfirmansyah.61@gmail.com, 2 Chr.budiman@yahoo.co.id, 3 ellisya@yahoo.com

ABSTRACT

This study aims to test and analyze the effect of Organizational Citizenship Behaviour (OCB), Total Quality Management (TQM), Technology Leadership and Service Quality on the performance of private universities in Surabaya. Data analysis techniques used Component Based Structural Equation Modelling (SEM) by using a Smart Partial Least Square (PLS). Data were collected from all private universities in Surabaya as many as 24 universities. There were 72 respondents altogether and it means that there were only 3 questionnaire distributed in each university.

The results showed that Organizational Citizenship Behaviour (OCB) had significant effect on Total Quality Management (TQM) and Total Quality Management (TQM) significantly affected Service Quality. In addition, Organizational Citizenship Behaviour (OCB), Technology Leadership, Total Quality Management (TQM) and Service Quality had significant effect on the performance of private universities in Surabaya respectively, whereas, Technology Leadership did not significantly affect Service Quality.

Keywords: Organizational Citizenship Behaviour (OCB), Total Quality Management (TQM), Service Quality, The performance of private universities in Surabaya.

INTRODUCTION

University is a place to produce nation’s thinker. Nowadays, graduates from university still have low readiness to enter the world of work. It becomes the biggest challenge for universities in Indonesia to increase the quality of their graduates and to produce graduates who are innovative and ready to work. Hence, universities are expected to always be able to adjust themselves, grow, and improve themselves through organization. It also applies to private universities that also work in educational field towards the creation of human resources who are competent in all life dimensions.

In facing globalization era, universities need to prepare themselves in the competition of producing graduates who are ready to face the globalization era. Therefore, private universities require appropriate strategies to develop Organizational Citizenship Behaviour (OCB) that will affect Total Quality Management (TQM) and the role of information technology (Technology leadership) in the process of teaching and learning will increase the service quality of those private universities so that it can improve the performance of the private universities. The organizational performance of private universities is an indicator of achievement level and it reflects the success of the members of the organization. Hence, the performance of private universities is the goal of the organization affected by people inside the organization itself.
LITERATURE REVIEW

Organ (1990) defines Organizational Citizenship Behaviour (OCB) as behaviour and an attitude that give benefit to the organization and it cannot be imposed by obligation of formal role or contract or recommendation. A successful organization needs employees who will perform way beyond their formal obligation and give performance that is beyond expectation. Facts show that organization having employees with good Organizational Citizenship Behaviour (OCB) will have a better performance than other organizations (Robbins & Judge, 2008).

The development of human resources in universities is a must so that the organizations are able to compete in this era. In term of higher education, the implementation of OCB as an approach in human resource management is the right thing to do since the description of work of lecturers is different from that of employees in commercial institution or company. Schnake & Dumler (2003) states that the dimensions of OCB mostly used in empirical studies are altruism, conscientiousness, civic virtue, sportsmanship and courtesy.

Total Quality Management (TQM) is a concept and method requiring commitment and involvement from management and all organization in the management of states that TQM is the strategy and the integration of management system to increase customer satisfaction, prioritize the involvement of all managers and employees, and use the quantitative method. The implementation of TQM in private universities is not a process of a short term change. Yet, it is a long term effort that will be performed consistently and continuously to increase the performance of the organization. In order to utilize all capabilities of private universities to reach the set standard, a cooperation among the elements of process agents (lecturers) as academia to increase the quality of private universities must be developed. There are two practices of TQM namely Soft TQM and Hard TQM. The indicators of Soft TQM are Leadership, People Management, Customer Focus and the indicators of Hard TQM are Planning, Process Management, and Information and Analysis (Jung & Hong, 2008).

Service Quality is one of important factors for the success of private universities as a service company. Service Quality is a phrase that must be performed well by a service provider. Goetsch & Davis in Tjiptono (2005) define service quality as a dynamic condition related to products, service, human, process, and environment that meets or exceeds expectation. According to Tjiptono & Diana (2005), service quality is a belief related to receive service. Wahlers (1994) states that an appropriate and accurate strategy in a service quality is an important factor that will affect competitive advantage if well planned and well implemented. In this study, the service quality of private universities is indicated on the service rate given by private universities to students in term of service of academic needs of students. Indicators in this theory are developed from Kotler theory (2005) in describing five criteria determining service quality consisting of Reliability, Responsiveness, tangible, Empathy, Assurance.

Porter (1985) explains the role of human resources and technology as a tool to achieve competitive advantage. Private universities are given a choice of Technology Management Strategy that is Technology Leadership or Technology Involvement. On the one hand, Technology Leadership means that private universities try to the first to introduce technological change to support their strategies. On the other hand, private universities that do not use technology leadership are considered as private universities that follow strategy of technology involvement. Technology leadership is coordinator of technology, computerized devices or coordinator of Communication and Information Technology that can help the operational of an organization as well as important tasks in an organization (Lai & Pratt, 2004).
The implementation of technology leadership in private universities becomes the turning point in the development of information technology that will be implemented in that university. Nowadays, the existence of information technology system is inseparable from the process of teaching and learning performed by lecturers. The utilization of information technology will give positive effect on the increase of private university performance so that it can be a competitive advantage. The unreadiness of private universities in facing the demands of the change in communication technology and information will have a fatal impact as the opportunities that can be achieved will be vanished. Robert (1980) states that the total effect of individual consequence due to technological change and the effect of technological interaction with political and social economic strengths causes the closing of opportunities that can be achieved.

Performance of private universities is something produced by an institution in a given period with reference to established standards. In the assessment of performance in private universities, how the performance of members of the organization can affect organizational performance of private universities will be investigated. With the performance evaluation of the members of the organization, it can be known exactly what is being addressed and what targets to be achieved by the organization. Through the performance assessment of the members of the organization, plans and strategies can be arranged and the steps that need to be taken with respect to the achievement of the desired goals of the organization can be determined. According to Mangkunegoro (2001), there are several factors that affect a person's performance, namely: (1) ability factor, generally this ability is divided into two namely potential ability (Intelligence Quotient) and the reality ability (knowledge and skills), (2) motivational factors, the motivation is formed from lecturer attitude as academia in facing the work situation. Motivation for lecturers as an academic society member is critical in achieving the vision and mission of the universities. Being lecturer as an academic society member should be a motivation that is formed from the beginning (by plan), not as a necessity or chance (by accident).

**STATEMENT OF THE PROBLEM**

Based on the background described, formulations of the problem are as follows:

1. Does OCB (Organizational Citizenship Behaviour) significantly affect Soft TQM?
2. Does OCB (Organizational Citizenship Behaviour) significantly affect Hard TQM?
3. Does Technology Leadership significantly affect Service Quality?
4. Does Soft TQM significantly affect Service Quality?
5. Does Hard TQM significantly affect Service Quality?
6. Does OCB (Organizational Citizenship Behaviour) significantly affect the Performance of Private Universities in Surabaya?
7. Does Technology Leadership significantly affect the Performance of Private Universities in Surabaya?
8. Does Soft TQM significantly affect the Performance of Private Universities in Surabaya?
9. Does Hard TQM significantly affect the Performance of Private Universities in Surabaya?
10. Does Service Quality significantly affect the Performance of Private Universities in Surabaya?
OBJECTIVE OF THE STUDY
Based on the background of the study and the formulation of the problem which has been described previously, the objectives to be achieved in this study are as follows:

1. To test and analyze the effect of OCB (Organizational Citizenship Behavior) on Soft TQM
2. To test and analyze the effect of OCB (Organizational Citizenship Behavior) on Hard TQM
3. To test and analyze the effect of the Technology Leadership on Service Quality
4. To test and analyze the effect of Soft TQM on Service Quality
5. To test and analyze the effect of Hard TQM on Service Quality
6. To test and analyze the effect of OCB (Organizational Citizenship Behavior) on the Performance of Private Universities in Surabaya
7. To test and analyze the effect of the Technology Leadership on the Performance of Private Universities in Surabaya
8. To test and analyze the effect of Soft TQM on the Performance of Private Universities in Surabaya
9. To test and analyze the effect of Hard TQM on the Performance of Private Universities in Surabaya
10. To test and analyze the effect of Service Quality on the Performance of Private Universities in Surabaya

HYPOTHESES
Based on the problem formulation proposed, theoretical foundation, framework of thinking process and the proposed conceptual framework, research hypotheses are formulated as follows:

H1: Organizational Citizenship Behaviour (OCB) significantly affects Soft TQM at private universities in Surabaya.
H2: Organizational Citizenship Behaviour (OCB) significantly affects Hard TQM at private universities in Surabaya.
H3: Technology Leadership significantly affects Service Quality at private universities in Surabaya.
H4: Soft TQM significantly affect Service Quality at private universities in Surabaya.
H5: Hard TQM significantly affect Service Quality at private universities in Surabaya.
H6: Organizational Citizenship Behaviour (OCB) significantly affects the performance of private universities in Surabaya.
H7: Technology Leadership significantly affect the performance of private universities in Surabaya.
H8: Soft TQM significantly affect the performance of private universities in Surabaya.
H9: Hard TQM significantly affect the performance of private universities in Surabaya.
H10: Service Quality significantly affect the performance of private universities in Surabaya.
RESEARCH METHOD

The population in this study is private universities in Surabaya consisting of 25 Universities. While the sample taken was 24 universities in which 3 questionnaires were distributed in each university. Thus, the number of samples used was 24 x 3 = 72 respondents. To test the hypotheses, quantitative methods with a statistical test were used. The data analysis technique used in this study was the Component-Based Structural Equation Modelling (SEM) where the calculation was conducted by using the Smart Partial Least Square (PLS).

Conceptual Framework

RESULTS AND DISCUSSIONS

Table 1. Test of Inner Weight on the Performance of Private Universities (Y4) using Bootstrap sample

<table>
<thead>
<tr>
<th>Effect</th>
<th>Original Coef.</th>
<th>(Bootstrap B=100)</th>
<th>(Bootstrap B=200)</th>
<th>(Bootstrap B=300)</th>
<th>(Bootstrap B=500)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>t-Test</td>
<td>Coef. t-Test</td>
<td>Coef. t-Test</td>
<td>Coef. t-Test</td>
</tr>
<tr>
<td>OCB(X1) → ST(Y1)</td>
<td>0.716</td>
<td>0.728</td>
<td>15.576</td>
<td>0.721</td>
<td>30.958</td>
</tr>
<tr>
<td>OCB(X1) → HT(Y2)</td>
<td>0.461</td>
<td>0.485</td>
<td>7.285</td>
<td>0.480</td>
<td>13.500</td>
</tr>
<tr>
<td>TL(X2) → SQ(Y3)</td>
<td>0.007</td>
<td>0.002</td>
<td>0.214</td>
<td>0.004</td>
<td>0.304</td>
</tr>
<tr>
<td>ST(Y1) → SQ(Y3)</td>
<td>0.239</td>
<td>0.242</td>
<td>4.125</td>
<td>0.231</td>
<td>6.755</td>
</tr>
<tr>
<td>HT(Y2) → SQ(Y3)</td>
<td>0.762</td>
<td>0.765</td>
<td>14.895</td>
<td>0.773</td>
<td>24.276</td>
</tr>
<tr>
<td>OCB(X1) → PER(Y4)</td>
<td>0.469</td>
<td>0.445</td>
<td>7.043</td>
<td>0.470</td>
<td>6.851</td>
</tr>
<tr>
<td>TL(X2) → PER(Y4)</td>
<td>0.392</td>
<td>0.429</td>
<td>3.757</td>
<td>0.368</td>
<td>5.034</td>
</tr>
<tr>
<td>ST(Y1) → PER(Y4)</td>
<td>0.339</td>
<td>0.285</td>
<td>3.340</td>
<td>0.343</td>
<td>3.750</td>
</tr>
<tr>
<td>HT(Y2) → PER(Y4)</td>
<td>0.132</td>
<td>0.139</td>
<td>0.836</td>
<td>0.177</td>
<td>1.574</td>
</tr>
<tr>
<td>SQ(Y3) → PER(Y4)</td>
<td>0.340</td>
<td>0.334</td>
<td>2.837</td>
<td>0.324</td>
<td>5.200</td>
</tr>
</tbody>
</table>
Having tested the validity and reliability of all latent variables which are valid and reliable, and the testing of B = 500 bootstrap samples gave significant results, then it was proceeded with the analysis presented in the form of a diagram below:

Test results of a complete model with SmartPLS program can be seen from the value of R-Square that describes the goodness-of-fit of the model. R-square values recommended are greater than zero.

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Citizenship Behaviour (OCB) (X1) → Soft Total Quality Management (Y1)</td>
<td>0.513</td>
</tr>
<tr>
<td>Organizational Citizenship Behaviour (OCB) (X1) → Hard Total Quality Management (Y2)</td>
<td>0.212</td>
</tr>
<tr>
<td>Technology Leadership (X2), Soft Total Quality Management (Y1), Hard Total Quality Management (Y2) → Service Quality (Y3)</td>
<td>0.857</td>
</tr>
<tr>
<td>Organizational Citizenship Behaviour (OCB) (X1), Technology Leadership (X2), Soft Total Quality Management (Y1), Hard Total Quality Management (Y2), Service Quality (Y3) → Performance of Private Universities (Y4)</td>
<td>0.731</td>
</tr>
</tbody>
</table>

Sources: The Processed Data

The suitability of the structural model can be seen from (Q^2) as follows:

\[
Q^2 = 1 - \left[ (1 - R_1^2) (1 - R_2^2) (1 - R_3^2) (1 - R_4^2) \right]
\]

\[
= 1 - \left[ (1 - 0.513) (1 - 0.212) (1 - 0.857) (1 - 0.731) \right]
\]

\[
= 1 - \left[ 0.487 \times 0.788 \times 0.143 \times 0.269 \right]
\]

\[
= 0.985
\]

The results of the suitability of the structural model (Q^2) showed that all Q^2 values were greater than zero. This means that our model has already met the required Goodness of Fit.
Table 3. Results of Hypothesis Testing

<table>
<thead>
<tr>
<th>Variable</th>
<th>Path Coeff.</th>
<th>t Statistics</th>
<th>t table</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organizational Citizenship Behavior (OCB) (X1) → Soft Total Quality Management (Y1)</td>
<td>0.719</td>
<td>36.603</td>
<td>1.96</td>
<td>t-Statistics&gt; t-table</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hypothesis is accepted</td>
</tr>
<tr>
<td>2. Organizational Citizenship Behavior (OCB) (X1) → Hard Total Quality Management (Y2)</td>
<td>0.469</td>
<td>27.086</td>
<td>1.96</td>
<td>t-Statistics&gt; t-table</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hypothesis is accepted</td>
</tr>
<tr>
<td>3. Technology Leadership (X2) → Service Quality (Y3)</td>
<td>0.006</td>
<td>0.373</td>
<td>1.96</td>
<td>t-Statistics&lt; t-table</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hypothesis is rejected</td>
</tr>
<tr>
<td>4. Soft Total Quality Management(Y1) → Service Quality (Y3)</td>
<td>0.242</td>
<td>10.835</td>
<td>1.96</td>
<td>t-Statistics&gt; t-table</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hypothesis is accepted</td>
</tr>
<tr>
<td>5. Hard Total Quality Management(Y2) → Service Quality (Y3)</td>
<td>0.762</td>
<td>32.779</td>
<td>1.96</td>
<td>t-Statistics&gt; t-table</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hypothesis is accepted</td>
</tr>
<tr>
<td>6. Organizational Citizenship Behavior (OCB) (X1) → Performance of Private Universities (Y4)</td>
<td>0.472</td>
<td>11.385</td>
<td>1.96</td>
<td>t-Statistics&gt; t-table</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hypothesis is accepted</td>
</tr>
<tr>
<td>7. Technology Leadership (X2) → Performance of Private Universities (Y4)</td>
<td>0.387</td>
<td>8.520</td>
<td>1.96</td>
<td>t-Statistics&gt; t-table</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hypothesis is accepted</td>
</tr>
<tr>
<td>8. Soft Total Quality Management(Y1) → Performance of Private Universities (Y4)</td>
<td>0.337</td>
<td>7.446</td>
<td>1.96</td>
<td>t-Statistics&gt; t-table</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hypothesis is accepted</td>
</tr>
<tr>
<td>9. Hard Total Quality Management(Y2) → Performance of Private Universities (Y4)</td>
<td>0.149</td>
<td>2.122</td>
<td>1.96</td>
<td>t-Statistics&gt; t-table</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hypothesis is accepted</td>
</tr>
<tr>
<td>10. Service Quality (Y3) → Performance of Private Universities (Y4)</td>
<td>0.334</td>
<td>8.790</td>
<td>1.96</td>
<td>t-Statistics&gt; t-table</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hypothesis is accepted</td>
</tr>
</tbody>
</table>

Sources: The Processed Data

CONCLUSION

Based on the analysis and verification performed using Structural Equation Modelling and the analysis with PLS program regarding the effect of Organizational Citizenship Behaviour (OCB), Total Quality Management (TQM), Technology Leadership and Service Quality on the Performance of Private Universities, some conclusions can be drawn as follows:

1. Organizational Citizenship Behaviour (OCB) significantly affected Soft Total Quality Management. This result was supported by the results of research conducted by Adawiyah & Scout (2012) which proved that the Organizational Citizenship Behaviour (OCB) has significant and positive relation with Soft TQM. These results are also consistent with the results of the study of Mehrabi et al. (2013) who found that the Organizational Citizenship Behaviour (OCB) has significant and positive relation with Soft TQM.
2. Organizational Citizenship Behaviour (OCB) significantly affected Hard Total Quality Management. This result was supported by the results of the study Buentello et al. (1995) which proved that the OCB positively and significantly affects Hard TQM. These results are also consistent with the results of research conducted by Hansson (2001) showing that OCB has a positive effect on Hard TQM. Other research finding supporting the findings in this study is a research conducted by Jung & Hong (2008) who found that organizational culture is indicated by the OCB significantly affects how TQM is managed and implemented.

3. Technology leadership did not have a significant effect on Service Quality. The result of this study was supported by research conducted by Rahmawati (2010) showing that the utilization of information technology does not affect the service quality. This is not in line with the theory of Zhu et al. (2002) saying that the Information Technology (IT) based service that customer is perceived have a direct positive effect on the overall dimensions of service quality. The findings in this study also is not in line with the results of research of students (2011) saying that the higher the role of information technology, the higher quality of service.

4. Soft Total Quality Management significantly affected Service Quality. The result of this study was supported by research conducted by Sularso & Murdijanto (2004) stating that the implementation of TQM has a good effect on improving the quality of human resources. These results are also consistent with the results of the study conducted by Lamidi (2007) proving that soft TQM has a positive effect on service quality. The findings in this study were also supported by the results of research conducted by Revida & Coal (2009) showing that Total Quality Management has a positive effect on Service Quality.

5. Hard Total Quality Management significantly affected Service Quality. The result was consistent with the result of the research conducted by Prajogo & Brown (2004) showing that the practice of TQM significantly and positively affects performance quality. In addition, this research was also supported by the result of the research conducted by Gorji (2011) proving that there is a significant effect of hard TQM on service quality.

6. Organizational Citizenship Behavior (OCB) significantly affected the performance of private universities. These results are consistent with the theory of Robbins and Judge (2008) saying that the facts demonstrate that the organization having employees with OCB will automatically have a better performance than other organizations. This finding was supported by research Bachrach et al. (2006) showing that the Organizational Citizenship Behavior has a positive effect on organizational performance. Likewise, Khazaei et al. (2011) proving that there is a significant relationship between OCB and teacher performance. This finding was also supported by the results of the study conducted by Simanullang (2010) who found that the dimensions of OCB have a positive effect on students’ academic performance.

7. Technology Leadership significantly affected the performance of private universities. This result was supported by the result of the study conducted by Hariyanto (2009) showing that there is a positive relationship between the variables of technology and information systems to performance. This was consistent with theory of Einstein & Papenhausen (2006) explaining that the implementation and application of Information Technology (IT) will improve performance. This was also reinforced by the result of the study conducted by Darma (2000) in Seyal et al.
(2000) saying that the use of Information Technology will improve the performance of the company. The result of this study was also supported by Purwanto et al. (2011) who found that the information technology has a significant effect on the performance of the organization.

8. Soft Total Quality Management significantly affected the performance of private universities. This result was consistent with the results of the study conducted by Samson & Terziovski (1999b) proving that Total Quality Management (Soft TQM) has a positive effect on organizational performance. The result of this study was also supported by the results of the study conducted by Ramlawati et al. (2011) finding that Soft TQM has a positive effect on organizational performance. That study indicates that proper TQM practices can improve competitiveness, customer satisfaction and business performance. The finding of this study was also supported by the result of the research conducted by Abdullah & Dance (2012) proving that the soft TQM factors have a direct and indirect effect on performance.

9. Hard Total Quality Management significantly affected the performance of private universities. This result was supported by the result of the research conducted by Supratiningrum & Zuleika (2004) finding that there is a direct effect of the application of TQM on managerial performance. Likewise, the results of research conducted by Soedarso (2011) show that the variables Hard TQM have a positive and significant effect on the performance of the organization.

10. Service Quality significantly affected the performance of private universities. The results in this study was in line with the result of the research conducted by Zulkarnain (2012) finding that service quality and existing information systems in organizations affect organizational performance either individually or together. This shows that the support for service quality and adequate information systems in an organization will improve organizational performance. This result was also supported by Astura et al. (2012) proving that the internal service quality has a significant and positive effect on employee performance.

RECOMMENDATIONS

Based on the results of the study, suggestions proposed are as follows:

1. Private Universities in Surabaya need to motivate faculty and staff in order to build Organizational Citizenship Behaviour the improved performance of private universities in Surabaya.

2. It is expected that private universities in Surabaya applies maximum Technology Leadership in which it is expected to improve the service quality of private universities in Surabaya.

3. Further research is expected to expand the scope of research, for example on a different institution or company.

4. It is expected that further research to develop the variables used to know the factors that may affect the performance of a university better.

5. Further research needs to be done to develop a more comprehensive and practical knowledge so that the development of private universities is better than our expectations in the future.
REFERENCES


