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Research:

THE EFFECT OF THE QUALITY MANAGEMENT SYSTEM ISO 9001:2008 AND THE CONTRIBUTION OF THE INTERNAL AUDIT UPON THE ORGANIZATIONAL PERFORMANCE AT LP3I

(The Educational Education and Indonesia Professional Development)

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Abstract. *This research aims to determine the effect of the quality management system ISO 9001:2008 and the contribution of the internal audit upon the organizational performance. The quality management system ISO 9001:2008 has been focusing to 8 (eight) dimensions, namely customer focus, leadership, involvement of people, process approach, management system, factual approach to decision-making, mutual beneficial supplier relationship and continuous improvement.*

The population of this research was LP3I employees who have received the training on ISO 9001: 2008. The sampling technique used total sampling method, where the number of samples is equal to the population. Methods of data analysis using Structural Equation Modelling (SEM), with validity and reliability testing, goodness-of fit tests and hypothesis testing.

The results of this research has indicated that the quality management system ISO 9001: 2008 and the contribution of the internal audit have a significant effect on the organizational performance through the operational performance. However, the contribution of the internal audit has no effect on business performance.

Keywords: Quality Management System ISO 9001:2008, Structural Equation Modelling, The Contribution of the Internal Audit.

INTRODUCTION

Unfortunately, facing the globalization challenges can not be avoided either at the governmental sector of private sector, all parties are obliged to get ready to survive. Management standardization has been a big issue which is the Standard of Quality Management System. So that, either the government institution or private one has to prepare a frame work of the quality system which is in accordance with the organization's goal to be in compliance with the expectation of the customers or the institution partnership (Rahmawaty, 2010).

Demanding the quality of the products and services has been increasing lately as well as the competitive price. The quality of the products and sevices has been improved getting along with the competitive price in the market. (Dale, 2003). The most important thing to improve the performance is dealing with the competitive challenge refers to the continuous improvement focusing to the custoners.

Business management focusing to the flexibility and quality based on the globalization perspective has been reflected thru the quality management system applied. A lot of the companies or organizations have been trying to obtain the International Quality Standardization or ISO. Broad acceptance of ISO by business

institutions or non business ones has made the researchers' interests to know more about ISO implementation. (Gingele et al, 2002; Boiral, 2003; Briscoe et al, 2005). Quality Management System (QMS) according to Mei Feng et al (2008), ISO standard can be identified thru the three dimensions which is, ISO Certification Planning, organizations or companies commitment upon the quality, and the implementation of the standardized procedures.

In the educational world, the quality assurance is a service given by the educational institution to the stakeholders which is the students, alumnus, alumnus user, industries and the parents of the students. (Rahmawaty, 2010). Stakeholders will determine the aspects to be evaluated to define the quality of the educational institution, refers to the lecturing material and curriculum which is in accordance with the development of the industries and the applicable regulations, lecturers' competency should have to be in line with the facilities an the learning process of the students. Besides, Suroso (2013) has determined that other aspects such as the improvement of curriculum structure, human resources development as well as the organization are the important factors of the education in Indonesia.

Research about the quality management system in the universities/colleges has been done and developed by the former researcher in some modern countries and developing countries. Quality Management System ISO 9001-2008 is a standard applied by an organization to be able to get along with the globalization challenges to achieve the organization effectivity and efficiency. An organization is considered to have been running the quality management system accordingly when it has obtained a certified international certification. (Antariksa, 2014).

LP3I (An Educational Institute and Indonesia Professional Development) is an educational institution refers to services has been concerned obviously about the development of the Quality Management System. LP3I has adopted the Quality Management System ISO 9001:2008. This kind of standard has been applied to measure its quality management system. Having this Quality Management System, LP3I is expecting to provide the best quality services to the customers which is the commitment of the institute to provide the quality required.

In relation with the Quality Sistem Management (QMS) ISO 9001:2008, the institution is obliged to make the students become the competitive alumni. Therefore, LP3I has applied the Quality Management System ISO 9001:2008 accordingly to develop the operational structure and business functions. ISO 9001:2008 is a guideline to indicate the indicator of quality compliance upon the users to recognize furthermore about the institution promotion showing the interaction of varied procedures in the organization and explaining the objective and system of the organization.

The evaluation of the quality management system is connected with the internal audit contribution/role to implement the QMS ISO 9001:2008 accordingly. (Akhirunissa, 2012). According to ISO 9001 refers to the article 8 (Gaspersz, 2005) declared that the company implemented QMS should have to perform an audit to guarantee that the related requirements have been applied and maintained effectively. The compliance and efficacy of QMS should have to be evaluated as often as possible rather than have been monitored only by the management. Monitoring the QMS in varied organizations should have to be done better by the internal auditors (Kettunen, 2012). The audit results can be used as the corrective action to perform not only to guarantee the compliance of QMS refers to the worldwide requirements, but also business continuous improvement.

Research done by Alic and Rusjan (2010) has demonstrated that the internal audit function is to perform an inspection and evaluation upon the compliance and efficacy of the policy and procedures of the internal controlling system. The positive effects identified upon the QMS can be used as the fundamental evaluation of the internal audit refers to the achievement of the company goal and the development of the company performance.

THEORETICAL FRAME WORK AND HYPOTHESIS DEVELOPMENT

Library Review

Agency Theory

Agency theory determined that the agency connection has been appeared when one person or more principals employing other people (agent) to provide a service and furthermore, they have delegated the agent an authority to make decision accordingly (Jensen & Meckling, 1976). Conflict of interest between the principals and the agents could happen because of non compliance matter occured between the agents activities and the principals expectation reflecting to the agency cost, as follows:

1. The monitoring expenditure by the principals refers to the monitoring cost paid by the principals to monitor the agent behaivour managing the company.
2. The bounding expenditure by the agent (bounding cost) refers to the expenses to be paid by the agent to guarantee that the agent has not been jeopardizing the principals.
3. The residual loss refers to the decreasing utility of either principals or agent due to the agency relationship.

The Internal Auditor can help the management to reduce the agency cost. The Agency cost has occurred due to the conflict of interest between the agent and the principals which is it can be reduced by studying, investigating and evaluating all the activities done by the company. This evaluation function is to make sure that the objectives of the company have been running effectively and providing the company to make a strategic decision properly. The success of the internal audit as an agent to perform his/her task independently and objectively has become a media to perform a continuous improment of the system, process and product supporting the efficacy of the QMS ISO 900:2008.

TQM (Total Quality Management)

TQM describing an approach to improve the organization performance as well as company business overall. TQM approaching have oriented to the organization, customer and market combining facts finding and problem solving to improve the quality, productivity and performance of the organization (Gaspersz, 2011:349). This approach has two main aspects to be performed, quality management and continuous improvement.

QMS according to Gaspersz (2011) is a group of documented procedures to guarantee the compliance of a process and product based on a certain requirement. This documented procedures are to avoid any mistakes happened during the processing of the products as well as a continuous improvement to produce the products required by the customer obviously. In connection with LP3I which is an educational institution, TQM has become a fundamental framework to apply the quality system accordingly being able to meet the expectation of the stakeholders refers to the quality.

The Quality Management System (QMS) ISO 9001:2008

QMS is a group of documented procedures and standard management practices to guarantee the compliance of a process and product upon the specific requirements. Gaspersz (2005), ISO 9001 is an International Standard of the Quality Management System. ISO 9001 has identified some requirements and recommendations about the design and the evaluation of the QMS to guarantee that the organization has been providing the products/services which are in compliance with the determined requirements.

In order to guarantee the quality consistency which is in line with the work processing of ISO 9001, a good planning, process monitoring and continuous and consistent execution are obliged to be implemented properly. (Nugroho, 1997:33). Therefore, the management is obliged to take some corrective actions when a

miscompliance has been occurred.

A company should have to provide some processing steps to succeed the implementation of ISO 9001:2008 that has been divided into 8 principles of quality management (Sumaedi & Yarmen, 2015) as follows:

1. Focus to the customers – all the activities of planning and system implementation have been apply to satisfy the customers requirements.
2. Leadership – ability to motivate people to take full responsibility of the job showing a commitment and consistent leadership in order to implement the quality management system in the organization accordingly.
3. All parties involvement. All the elements of the organization are involved and concerned about the implementation of the quality management system which is getting along with each party function. All the people have been doing their best and showing that they have done their job properly.
4. Processing approach. The activities to implement the system should have to follow the flow of the process within an organization.
5. Approaching the system to the management. Understanding the identification and the management of the system about the interconnection of the process to develop and to achieve the goals of the company/organization effectively and efficiently. (Sumarjan et al. 2013).
6. Continuous Improvement. Is a part of the improvement of the organization performance to reach the quality target (Brown, 2013).
7. The Decision Making Approach. Every decision made to implement the system should have to be in accordance with facts and data.
8. Win-win with suppliers. Supplier is not a helper but a business partner of the organization. Supplier or mass provider is an unseparated element within the activities of an organization.

Internal Audit Contribution / Role

Internal audit is an activity to build up the trustworthy and to provide the consultation independently and objectively designed to give a value-added and to improve the operational activities of the organization. Internal audit has a function to support an organization to achieve its goals using a systematical approach to evaluate and to improve the efficacy of risk management, controlling, and good corporate governance process.

Internal Audit Function in the management is a supporting tool to ensure the availability of the information, the compliance with the policies, planning, procedures, regulations and laws. Furthermore, it has given some advices or recommendation objectively to improve the activities audited to give a value-added for the management which is going to be a guideline to make a decision or to follow-up due to the achievement of the organization goals accordingly (Hery, 2010:93).

Internal audit has a very important function to deal with the company management and the related risks appearing in the business (Sawyer, 2005). Internal audit has been becoming a strategical function within the company, especially huge companies. More over, internal audit has provided a proper information independently and it has assisted the company to improve the quality obviously. Internal audit has performed an evaluation independently to analyse the operational activities of the company by examining and evaluating the performance of the company efficiently and effectively.

The execution of internal quality audit that has been conducted properly can be used as a media of good continuous improvement process refers to the process and product system to support the efficacy of The Quality Management System ISO 9001:2008. This audit function can be applied to define the category of the QMS applied. (Kettunen, 2012). Furthermore, the findings of the audit can be applied to examine the efficacy of QMS accordingly and to identify the probability of corrective actions. The audit has been conducted to make sure that the QMS requirements have been applied

according to the standard of the requirements effectively to reach the determined goals. (Indranata, 2006).

Organizational Performance

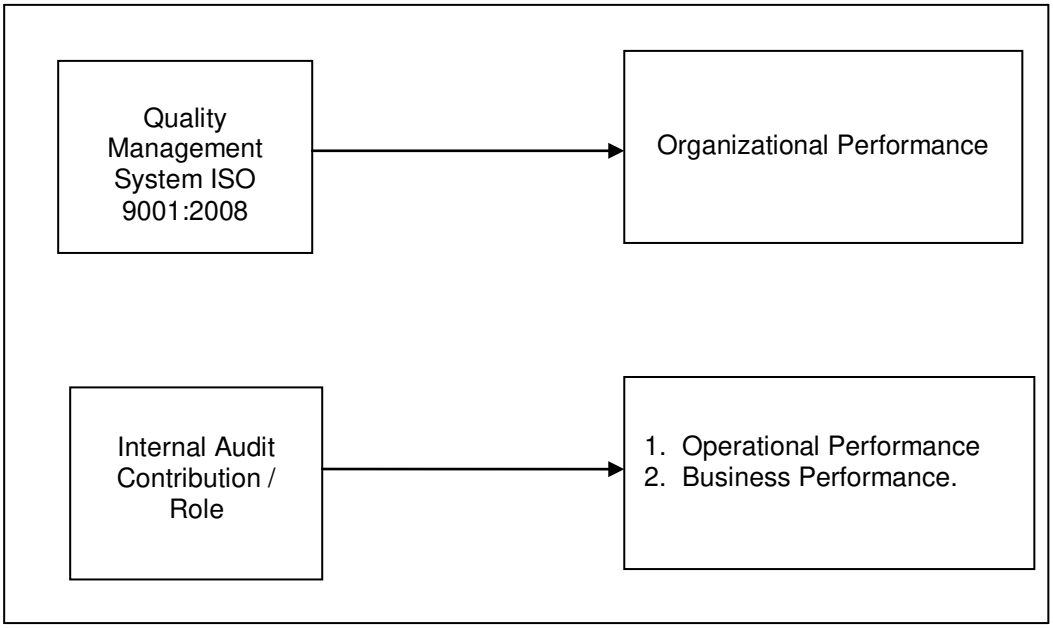
Stoner (in Arnia, 2001), a performance is a job has been done by a person, team or organization quantitatively and qualitatively. Amstrong and Baron determined that a performance is a result of the job conducted which is in line with the strategic company goals, customer satisfaction, and economical contribution (Wibowo, 2008). Performance is the best example of controlling upon the evaluation and measurement value obviously. Job performance has to be conducted periodically upon the effectiveness of the organization operation, organization and employees based on the objective, standard, and criteria which have been determined before.

Venkatraman and Ramanujam (1986) identified that a company performance is a multidimentional construct. Company performance indicating a complete condition of a company within a certain period which is the result of the company operation utilizing its resources obviously. Sucipto (2003) defined that a company performance is a formal effort to be done to evaluate the company's activities efficiently and effectively within a certain period.

Company performance is a scientific knowledge in the management theory applied for the purpose of academics and professionals (Venkatraman & Ramajunajam, 1986). Hamma (1998) and Madu et al. (1999) described that some factors identifying the measurement of the performances are referring to the employees and customers satisfaction, business achievements related to the organization development. McAdam and Canning (2001) considered that ISO 9001 has given a significant benefit for small services companies refers to their internal communication and management system, service quality and profit ratio. Mei Feng et al, (2008) classified the company performance into two categories, operational performance and business performance. Lee et al. (2009) identified that all the performance of the organization refers to ISO 9001 certification have been covering customer satisfaction, customer services, efficiency of internal administration, low quality cost and employees turnover.

Frame Work

Based on the research examining some models and related theories applied in the QMS ISO 9001:2008, this research frame-work has been developing the research model of Feng, et al. (2008), Alic & Rusjan (2010) and Suamedi & Yamen (2015) that have examined the components of QMS and Internal Audit Contribution refers to ISO 9001:2008 upon the Organization Performance at LP3I in Indonesia,



Picture 1. Research Design

Hypothesis Development

The Effect of Quality Management System ISO 9001:2008 upon the Operational and Business Performances

Rahman Research (2001) did not demonstrate the differences of the performance between the companies having ISO 9000 certified and not having certified. Simmons and White (1999) did not demonstrate a positive impact of ISO 9000 upon the operational performance itself. But, the research done by Mei Feng et al. (2008) has identified that ISO 9000 has a positive and significant effect upon the operational performance for the industrial and services companies which have been following the certification program to obtain more operational profit and a huge marketing possibility obviously. Lafuente et al. research (2010) has identified that the ISO 9000 Certification has been affecting positively upon the operational company performance refers to the improving of their productivity and ROA (return on asset) value.

In relation with the Quality Management System ISO 9001:2008, Psomas et al (2013) has demonstrated that the impact of ISO 9001:2008 effectiveness has been affected directly by the operational performance and the products/services quality. Sumaedi and Yarmen (2015) has recommended 8 (eight) instruments of ISO effectiveness measurement to re-identify the contribution of ISO 9001. To revise or to improve the ISO 9001 requirements, QMS should have to be improved continuously refers to the continuous improvement to accommodate the evaluation about the development of the customers requirements obviously.

Based on the aforementioned description, the following hypotheses will be examined accordingly,

H_1 = Quality Management System ISO 9001:2008 has affected positively upon the operational performance.

Research done by Sun (2000), Chow-Chua (2003) and Posmas et al. (2013) did not determine the effects of ISO 9000 certification upon the improvement of business performance/financial even though the result of Mei Feng Research et al. (2008) has demonstrated a positive smal effect of the ISO implementation upon the business

performance applying the variable of ISO 9001 certification planning, organization commitment and procedures implementation. Therefore, this research has re-evaluated the following hypothesis;

H_2 = Quality Management System ISO:2008 has affected positively the Business Performance.

The Effect of Internal Audit Contribution upon the Operational and Business Performance

The execution of the internal audit refers to ISO 9001 requirements has given a direct benefit which is the recommendations due to the non-confirmity activity, an organized and well documented QMS, a job performance visibility, a quality guarantee of the products and sevices to the customers, a motivation to the employees to implement it properly, independently, systematically and a systematic and an objective approach to solve the problem. The result of the internal audit can be used as the management tools to explain the knowledge of the quality and the culture among the employees, to distribute the quality management practices, to give the recommendation to review the organization to be able to improve the company's competitiveness and business efficiency, to improve the quality of the management principles to contribute the development of the quality management further more.

Terziovski et al. (2003) determined that an audit did not identify any benefit obtained because of ISO 9000 certification upon the business performance. But, Alic & Rusjan research (2010) considered that internal audit has provided a contribution and motivation upon the business performance improvement which is in line with the objective of internal audit about the efficient performance refers to ISO 9001 about the quality.

The contribution of internal auditor is to review all the operational activities or the program have been determined by the company and to ensure that the results are consistent and in compliance with the planning, business objectives. Therefore, the following hypothesis will be examined;

H_3 = Internal Audit contribution has been affecting positively upon the Operational Performance.

H_4 = Internal Audit contribution has been affecting positively upon Business Performanve.

RESEARCH METHOD

Population and Procedure to Define the Samples

The population of this research is all the employees of LP3I, staffs, head of KBK, Kaprodi (manager of the program), executive officers and Board of directors at the head office, LP3I at Kramat campus and LP3I polytechnique in Jakarta. The quantity of the samples is defined according to the guideline refers to the total of the samples required within the analysis method of the Structural Equation Modelling (SEM). Hair et al. (2010) described that some guidelines have the same total of the samples refers to SEM research which is 100 – 200 samples to apply the estimation method of maximum likelihood.

Technique sampling method refers to total sampling method which is the total of the samples are just the same with the population (Sugiyono, 2014). This sampling method aims to obtain a representative, objective and generalized result in compliance with the important of Quality Management System ISO 9001:2008, specifically upon the employees of LP3I who have been trained about ISO 9001:2008 which is 123 respondents.

Operationalized Variable

1. Latent Variable

Quality Management System ISO 9001:2008

In this research, QMS ISO 9001:2008 has been defined as a formulation and design about the steps of the ISO 9001 implementation focusing to the customers, leadership aspects, other parties involvement, process approach, win win solution teamwork with suppliers and continuous improvement. The indicator of each dimension within the variable of QMS ISO 9001:2008 adopted from the questionnaires provided in the research of Sumaedi & Yarmen (2015). This latent variable (Exogen) has used the terms of 'SMM' within the diagram path which has been constructing 13 (thirteen) indicators.

Internal Audit Contribution

In this research, Internal Audit Contribution is defined as one of the recommendations of the management to determine the fundamental guideline to execute a proper corrective action and preventive one to achieve the quality of the company goal. The dimension of this variable is covering the customers feedback, processing performance and products compliance, and SMM performance improvement. The indicator of each dimension of the variable of Internal Audit Contribution has been adopted from the questionnaires provided in the research of Alic & Rusjan (2010). Latent Variable (exogen) has used the term 'PIA' within the diagram path which has been constructing 8 (eight) indicators.

Operational Performance

In this research, the Operational Performance can be defined as a performance evaluation related to the aspects of productivity, product quality and customer satisfaction. The indicator of the Operational Performance variable has been adopted from the questionnaires obtained in the research of McLean (2006) and Mei Feng et al. (2008). The Latent variable (endogen) is using the term'KO' within the diagram path which has been constructing 6 (six) indicators.

Business Performance

In this research, Business Performance can be defined as the performance related to the aspects of finance and marketing such as sales development, profitability category and market. The indicator of Business Performance variable has been adopted from the questionnaires obtained in the research of Mei Feng et at. (2008) and Psomas et al. (2013). The Latent variable (endogen) has used the term'KB' within the diagram path which has been constructing 5 (five) indicators.

2. Manifest Variable

Manifest variable is the variable that can be figured out or measured empirically which is the indicator (Wijanto, 2008). This variable has been an effect or measurement of the latent variable which has been contributed 32 (thirty-two) indicators which is the total item obtained within the research instruments.

To define the connection between the variables, dimension and indicator being used can be seen on the Table 1 as follows:

Table 1 Indicator of Variable Measurement

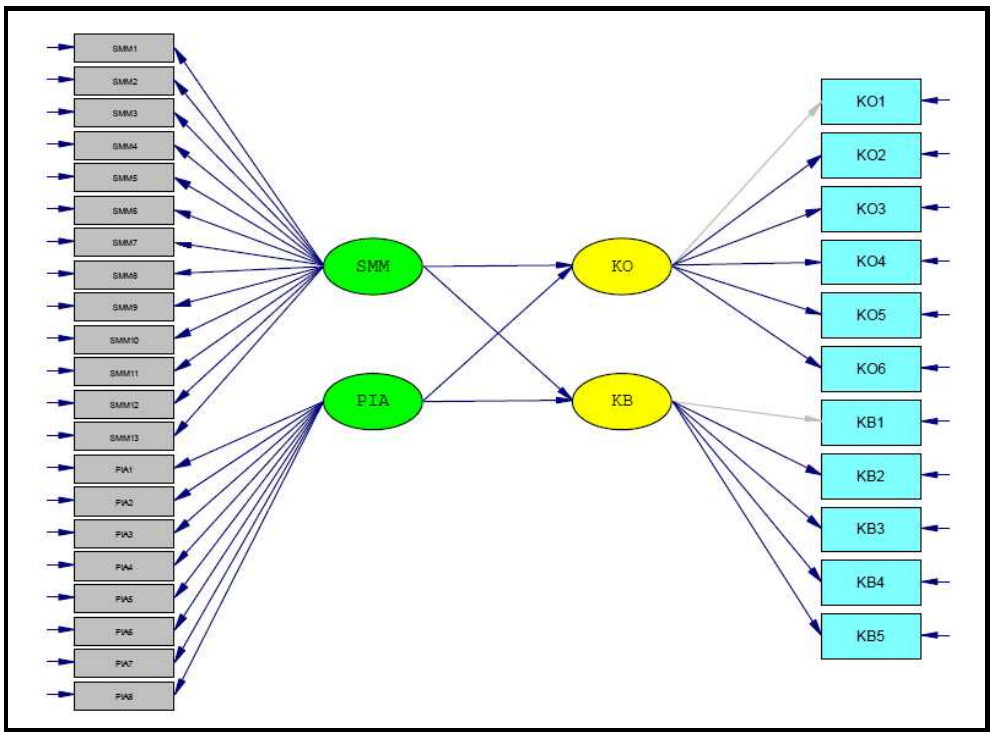
Latent Variable		Manifest Variable (Indicator)	Item
Quality Management System	Sumaedi & Yarmen (2015)	To identify and to consider the customers requirements.	SMM1
		To measure the customer satisfaction and to improve it.	SMM2
		Customer complaint handling	SMM3
		Top-management involvement.	SMM4
		Distribution of quality policy	SMM5
		Clarification of job description.	SMM6
		Performing an effective training system.	SMM7
		Effective measuring and controlling system.	SMM8
		Internal communication system.	SMM9
		Decision making based on the data.	SMM10
		Vendor selection and evaluation system	SMM11
		Internal corrective and preventive system.	SMM12
		Management Review System.	SMM13
Internal Audit Contribution	Alic & Rusjan (2010)	Communication with the customers.	PIA1
		Combining the product and the services.	PIA2
		Requirements and Regulation Compliance.	PIA3
		Job Structuring	PIA4
		Job disturbances occurred..	PIA5
		Job competency and experiences sharing.	PIA6
		Communication of the interpersonal relationship among the employees. .	PIA7
		Supporting a Continuous Improvement Execution .	PIA8
Operational Performance	McLean et al. (2006); Feng, Mei. et al. (2008)	Cost reduction	KO1
		Productivity improvement	KO2
		Quality improvement.	KO3
		Customers satisfaction improvement.	KO4
		Internal procedure Improvement	KO5
		Employees motivation Development.	KO6
Business Performance	Feng, Mei. et al. (2008); Psomas et al. (2013)	Market Increasing	KB1
		Company brand image improvement	KB2
		Competitiveness improvement	KB3
		Global market access improvement.	KB4
		Increasing the company profit.	KB5

Source : Developed within this research.

Research Model

This study has been done upon the enployees of LP3I who have been following the ISO 9001:2008 training consisting of staffs, Head of, KBK, Kaprodi, Executive Officer and BOD at LP3I head office, LP3I Kramat camput and LP3I Polytechnique in Jakarta. Data collection has applied survey method using questionnaires containing of variable measurement items that are applicable in this research method. Data being applied in this study is primary data obtained from the respondents who answer the questionnaires. The variable measurement has applied Likert Scale, when the respondent has chosen high grade on the item (absolutely agree) which is 5 score, but 1 score is for the lowest grade (absolutely not agree).

This research has applied Structural Equation Modelling (SEM). Evaluating some effects of the independent variables (QMS ISO 9001:2008 and Internal Audit Contribution) against some dependent variables (Operational and Business Performance) using bivariate regression technique within SEM assumption. The Interconnection patern among the variables has created the model and paradigm of the research that will be examined within this research, path diagram model is as follows:



Picture 2. Path Diagram Model of the Research.

After having had a developed model/theory illustrated on the flow diagram, then the specification model can been converted into the following equation:

The equations have been constructed are as follows :

1. Structural Equations

$$\eta_1 = \alpha + \gamma_{11}\xi_1 + \gamma_{12}\xi_1 + \zeta_1$$

$$\eta_2 = \alpha + \gamma_{21}\xi_1 + \gamma_{22}\xi_1 + \zeta_2$$

Note:

η_1 (Eta 1) : Endogen variable of the Operational performance (KO).
η_2 (Eta 2) : Endogen variable of the Business Performance (KB).
ξ_1 (Ksi 1) : Exogen variable of QMS ISO 9001:2008.
ξ_2 (Ksi 2) : Exogen variable of Internal Audit Role.
γ_{11} (Gamma11) : Coefficient of the effects of the exogen variable of QMS ISO 9001:2008 (SMM) against the endogen variable of the Operational Performance.
γ_{12} (Gamma12) : Coefficient of the effect of the exogen variable ofd QMS ISO 9001:2008 (SMM) against the endogen variable of the Business Performance.
γ_{21} (Gamma21) : Coefficient of the effects of the exogen variable of the Internal Audit Role (PIA) against the endogen variable of the Operational Performance.
γ_{22} (Gamma22) : Coefficient of the effect of the exogen variabl of the Internal Audit Role (PIA) against the endogen variable of the Business Performance.
$\zeta_{1;2}$ (Zeta 1;2) : The equations error refers to exogen variable and or endogen variable against the endogen variable.

2. Measurement Model

Table 2. Measurement Model Equations.

Internal Audit Role	**ISO 9001:2008 QMS**
SMM1 = $\lambda_1\xi_1 + \delta_1$	PIA1 = $\lambda_{14}\xi_2 + \delta_{14}$
SMM2 = $\lambda_2\xi_1 + \delta_2$	PIA2 = $\lambda_{15}\xi_2 + \delta_{15}$
SMM3 = $\lambda_3\xi_1 + \delta_3$	PIA3 = $\lambda_{16}\xi_2 + \delta_{16}$
SMM4 = $\lambda_4\xi_1 + \delta_4$	PIA4 = $\lambda_{17}\xi_2 + \delta_{17}$
SMM5 = $\lambda_5\xi_1 + \delta_5$	PIA5 = $\lambda_{18}\xi_2 + \delta_{18}$
SMM6 = $\lambda_6\xi_1 + \delta_6$	PIA6 = $\lambda_{19}\xi_2 + \delta_{19}$
SMM7 = $\lambda_7\xi_1 + \delta_7$	PIA7 = $\lambda_{20}\xi_2 + \delta_{20}$
SMM8 = $\lambda_8\xi_1 + \delta_8$	PIA8 = $\lambda_{21}\xi_2 + \delta_{21}$
SMM9 = $\lambda_9\xi_1 + \delta_9$	
SMM10 = $\lambda_{10}\xi_1 + \delta_{10}$	
SMM11 = $\lambda_{11}\xi_1 + \delta_{11}$	
SMM12 = $\lambda_{12}\xi_1 + \delta_{12}$	
SMM13 = $\lambda_{13}\xi_1 + \delta_{13}$	

Operational Performance		**Business Performance**	
KO1	$= \lambda_{22}\eta_1 + \varepsilon_1$	KB1	$= \lambda_{28}\eta_2 + \varepsilon_7$
KO2	$= \lambda_{23}\eta_1 + \varepsilon_2$	KB2	$= \lambda_{29}\eta_2 + \varepsilon_8$
KO3	$= \lambda_{24}\eta_1 + \varepsilon_3$	KB3	$= \lambda_{30}\eta_2 + \varepsilon_9$
KO4	$= \lambda_{25}\eta_1 + \varepsilon_4$	KB4	$= \lambda_{31}\eta_2 + \varepsilon_{10}$
KO5	$= \lambda_{26}\eta_1 + \varepsilon_5$	KB4	$= \lambda_{31}\eta_2 + \varepsilon_{11}$
KO6	$= \lambda_{27}\eta_1 + \varepsilon_6$		

Note:
λ (Lambda) : Co-variants matrix between loading indicators of latent variable.
δ (Theta) : Measurement error of the exogen variable indicator.
ε (Epsilon) : Measurement error of the endogen variable indicator.

In this research, the estimation model has applied LISREL 8.72 version which is one of the programs analysing causality model.

Data analysis technique has applied varied examinations which is, descriptive statistics, validity and reliability test, full-model test and hypothesis test.

DESCRIPTION AND RESULT OF THE RESEARCH

Descriptive Statistics

This research has distributed the questionnaires to 123 employees of LP3I who had been trained ISO 9001:2008 at the head office, LP3I at Kramat campus and LP3I polytechnique in Jakarta. 118 questionnaires were returned duly completed by the respondents or 95.93%. Table 3 is the recapitulation of the total samples and the samples returned.

Table 3. Total samples and returned questionnaires.

Description	**Total Sample**	**Total of the questionnaires**			
		Returned		**Not returned**	
		Total	**%**	**Total**	**%**
LP3I, Head Office	59	57	46.34%	2	1.63%
LP3I, Kramat campus	55	53	43.09%	2	1.63%
Politeknik LP3I Jakarta	9	8	6.50%	1	0.81%
Total overall	**123**	**118**	**95.93%**	**5**	**4.07%**

Sources: Primary data, 2015

Data collection had been taken one week periode from 27 August – 03 September 2015. The distribution of the questionnaires were sent by e-mail or directly by hand. Based on the information of the sampling which is 118 employees of LP3I who had been trained, it explained that the mayority of demographic characteristic is mostly productive women (31 – 50 years old) and they are S1 (BSc) and S2 (MSc).

Research Instrument Testing

Validity test has applied confirmatory factor analysis to test whether the questionnaire items or indicators of the latent variables applied can confirm a factor or construct accordingly. This validity test has been conducted 2 (twice) upon 32 items, since the first test was found out that some indicators were not valid which was SMM7 and PIA4-PIA8 refers to the standardized loading factors value of (<) 0.5. So that, the validity test should have to be redone without including the previous non valid items. Result of validity retesting can be seen on the following table 4;

Table 4. Result of the Validity Test

Laten Variable	Manifest Variable	t-value	t-critical	Standardized Loading Factors	Result
Quality Management System ISO 9002:2008	SMM1	9.15	> 1.96	0.54	valid
	SMM2	8.42		0.51	valid
	SMM3	7.68		0.63	valid
	SMM4	8.82		0.60	valid
	SMM5	10.11		0.60	valid
	SMM6	9.33		0.59	valid
	SMM8	9.09		0.59	valid
	SMM9	9.77		0.57	valid
	SMM10	9.95		0.69	valid
	SMM11	9.29		0.65	valid
	SMM12	8.75		0.67	valid
	SMM13	10.53		0.63	valid
Internal Audit Role	PIA1	10.12	> 1.96	0.64	valid
	PIA2	10.89		0.67	valid
	PIA3	7.93		0.53	valid
Operational Performance	KO1	8.94	> 1.96	0.63	valid
	KO2			0.80	valid
	KO3	8.63		0.74	valid
	KO4	8.39		0.77	valid
	KO5	8.22		0.72	valid
	KO6	8.30		0.74	valid
Business Performance	KB1	10.40	> 1.96	0.75	valid
	KB2			0.75	valid
	KB3	12.92		0.80	valid
	KB4	12.76		0.73	valid
	KB5	10.64		0.80	valid

Source : Result of Data Processing Lisrel 8.72, 2015

After having been doing validity retesting the result of the test has explained that all the indicators are valid since the value of standardized loading factors are bigger than (>) 0.5 which is in compliance with the validity assumption.

This research has applied the composite reliability measurement. The result has indicated that all the variables and indicators have had the value of construct reliability (CR) which is bigger than or the same with (≥) 0.70, it can be concluded that all the items of the questionnaires are reliable and can be used as the instruments of the research.

Full Model Test

The Result of modified Structural Equation Model (SEM) on table 5 has explained that the developed model of this research is in compliance with the criteria of full-model. The result of this full-model test has been identified acceptable fit, though, few goodness-of-fit indicating Poor-fit and Marginal-fit are still found out which is AGFI value 0.78 and GFI value 0.85. The modified Result of full-model rest is identified on the Table 5 as follows;

Table 5. Test result of Model compliance (Modified Full Model)

Measurement Index	Criteria Goodness-of-Fit	Estimate	Cut-off Value	Result
AbsoluteFit Measures	Chi-Square $(\chi)^2$	274,16	Diharapkan Kecil Expected small	Good-Fit
	p-value	0.076	> 0.05	
	GFI	0.85	> 0.90	Marginal-Fit
	RMSEA	0.034	< 0.05	Close-Fit
	RMR	0.037	< 0.05	Good-Fit
	Standardized RMR	0.053	≤ 0.08	Good-Fit
Incremental Fit Measures	AGFI	0.78	≥ 0.90 or approaching 1	Poor-Fit
	NFI	0.97	≥ 0.90 or approaching 1	Good-Fit
	TLI atau NNFI	0.99	≥ 0.95 or approaching 1	Good-Fit
	CFI	0.99	≥ 0.95 or approaching 1	Good-Fit
	RFI	0.96	≥ 0.90 or approaching 1	Good-Fit
Parsimonious Fit Measures	PGFI	0.58	> 0.50	Good-Fit
	PNFI	0.72	0.60 – 0.90	Good-Fit
	CMIN/dF	1.133	< 2.00	Good-Fit

Source : Result of Data Processing Lisrel 8.72, 2015

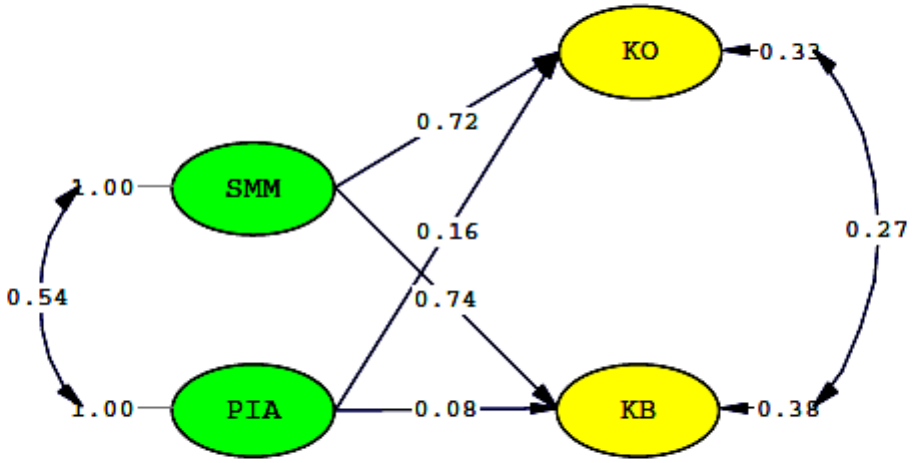
Structural Model Analysis

This Structural Model Analysis aims to test the hypotheses offered which is the sigficant level of 0.05 and t value of the structural equation should have been bigger than 1.96. The Output of LISREL 8.72 program has obtained a structural equation model against the organizational Performance as follows;

KO = 0.72*SMM+ 0.16*PIA ,Errorvar = 0.33 , R^2 = 0.67

KB = 0.74*SMM+ 0.076*PIA ,Errorvar = 0.38 , R^2 = 0.62

Based on the result of structural equations, it has obtained the value of each R^2 of 0.67 and 0.62 refers to 67% and 62% which is from the changes of latent variable of the operational performance and business performance. Path diagram of the structural model has been indicated on picture 3, as follows:



Picture 3, Path Diagram of the Structural Model

Referring to the evaluation of structural model of this research, then an overall result of t-value can be concluded on the table 6 as follows:

Table 6. t-*value Result*

Path Diagram	Estimate	t-value	Test Result
H_1 : QMS system ISO 9001:2008→ Operational Performance	0.72	7.43	Positive Significance
H_2 : QMS system ISO 9001:2008→ Business Performance	0.74	7.98	Positive Significance
H_3 : Internal Audit Role → Operational Performance	0.16	2.10	Positive Significance
H_4 : Internal Audit Role → Business Performance.	0.076	1.03	Not Significance

Sources: Result of Data Processing Lisrel 8.72, 2015

Based on the result of t-test on the table 6, it explains that:

1. T-value of the QMS ISO 9001:2008 variable is 7.43 and the significance of 0.72. It has explained that t-value is bigger than t-critical (7.43 > 1.96), so that, H_1 is acceptable. It has indicated that QMS ISO 9001:2008 has been affecting the Operational Performance significantly and positively.
2. T-value of QMS ISO 9001:2008 variable is 7.98 and the significance of 0.74. It has explained that t-value is bigger than t-critical (7.98 > 1.96), so that, H_2 is acceptable. It has indicated that the QMS ISO 9001:2008 has been affecting the Business Performance significantly and positively.
3. T-value of Internal Audit Role variable is 2.1o and the siginificance of 0.16. It has explained that t-value is bigger than t-critical (2.10 > 1.96), so that H_3 is acceptable. It has indicated that the Internal Audit Role has been affecting the Operational Performance significantly and positively.
4. T-value of the Internal Audit Role variable is 1.03 and the significance of 0.076. It has explained that t-value is smaller than t-critical (1.03 < 1.96), so that, H_4 is unacceptable. It has indicated that the Internal Audit Role has not been affecting the Business Performane significantly.

Description of the Results of the Research

Referring to the result of the hypotheses test being evaluated on the table 6 and related to either the theory or the result of the previous research, it explains that:

1. Result of the research has been indicating that the QMS ISO 9001:2008 has been affecting the Operational Performance significantly refers to t-value of 7.43 and the probability of 0.72. This result has been confirming the connection of the QMS ISO 9001:2008 which is the way to implement ISO 9001 focusing the customers, leadership aspect, other parties involvement, processing approach, approaching system to the management, approaching based on the decision making, win-win solution of business relationship with the supplier and a continuous improvement. This findings are getting along with the research of Mei Feng et al (2008), Lafuente et al (2010), Psomas et al (2013) describing that the QMS ISO 9001:2008 has been affecting the operational performance significantly and positively. In other words, the bigger effect of the QMS ISO 9001:2008, the better employee performance of the LP3I are.
2. The result of this research has indicated that QMS ISO 9001:2008 has been affecting significantly the Business Performance which is t-value 7.98 and the probability 0.74. This result did not comply with the research of Sun (2000), Chow-Chua (2003), Mei Feng et al. (2008), Psomas et al. (2013) that had not been indicating the effect of ISO upon the business/finance performance. It explains that the more effect of QMS ISO 9001:2008 the better Business Performance at LP3I happened.
3. The result of this research has indicated that the Internal Audit Role/Contribution has been affecting the Operational Performance significantly which is t-value 2.10 and the probability 0.16. This examination has been in compliance with the research of Alic and Borut (2010) indicating the effect of Internal Audit upon the Operational Performance. This finding has confirmed the connection of Internal Audit Role refers to the implementation of ISO 9001 which is the recommendation of the management to establish a corrective action and preventive action to achieve the quality of the goals of the company. Furthermore, it explains that the bigger Internal Audit Role, the higher Operational Performance at LP3I occurred.
4. The research has indicated that the Internal Audit Role does not have any significant effect upon the Business Performance refers to t-value of 1.03 and the probability of 0.076. This result is not getting along with the research of Terziovski et al (2003) determining that the audit does not have any connection with the benefit obtained refers to ISO 9000 certification upon the business performance. Nevertheless, this finding is in compliance with the research of Alic and Borut (2010) declaring that the Internal Audit has given a contribution and motivation to the increasing of business performance accordingly. In other word, LP3I should have to be more concerned about the aspects relating to the achievement of business performance covering the financial and marketing aspects refers to marketing development, profitability level and market.

Referring to the description overall about the hypotheses determined within this research which is from the former 4 (four) hypotheses offered only 3 hypotheses are complying with the previous research and 1 (one) is not complying with it. In other words, the aims of this research to identify and to evaluate the previous research about the QMS ISO 9001:2008 and the Internal Audit contribution against the organizational performance has been in compliance with the agency theory where the internal auditor has been contributing as an agent to evaluate all the activities of the company getting along with the implementation of ISO 9001 requirement to improve the organizational performance refers to the operational performance obviously.

In relation with the educational world, LP3I should have to be able to improve the organization goals, to increase the customers satisfaction due to the developing of

stakeholders' requirement. In order to have good graduated students, LP3I is obliged to execute a continuous improvement in line with the QMS ISO 9001:2008 requirements which is the quality improvement of the educational process to be more effective and efficient in order to support the strategic organizational decision making.

CONCLUSION, IMPLICATION, AND SUGGESTIONS

Conclusion

Based on the result and description of the research , it has been concluded as follows;

1. The Quality Management System ISO 9001:2008 has a significant effect upon the operational performance, it explains that the more effects of the QMS ISO 9001:2008, the better operational performance of the employees at LP3I occurred.
2. The Quality Management System ISO 9001:2008 has a significant effect upon the Business Performance, it explains that the bigger effect of the QMS ISO 9001:2008, the better of Business Performance at LP3I occurred.
3. The Internal Audit Role has a significant effect upon the operational performance, it has been explained that the audit has had a tendency of having a benefit connection upon the ISO 9001:2008 certification obtained upon the operationa performance at LP3I.
4. The Internal Audit Contribution had not been affecting significantly the Business Performance, it explains that the internal audit did not provide any contribution and motivation upon the improvement of business performance at LP3I obviously.

Implication

It has been concluded that this research has had the implication of the academics and further research as well as the professional people as follows:

1. For the academics: this research is expected to give a contribution to identify and evaluate the previous researches upon the development of the variables of the QMS ISO 9001:2008 accordingly.
2. For the companies: this research can be used to monitor and to evaluate the effectiveness of the implementation of the QMS ISO 9001:2008. The Internal Audit Contribution can explain the improvement of the quality of LP3I services refers to the Organizational Performance accordingly.

Suggestions

Further research is expected to be able to enlarge the coverage of the research at LP3I branches so that it can provide more results objectively by having more samples. Moreover, it is considerable to study other variables refers to the employees performance and the organizational culture affecting the organizational performance.

REFERENCES

Alic, M., Rusjan, B. (2010). *Contribution of the ISO 9001 Internal Audit to Business Performance*. International Journal of Quality & Reliability Management, *27* (8), 916-937.

Akhirunnisa, Agisti. A. (2012). *Peranan Audit Internal sebagai Alat Bantu Manajemen dalam Meningkatkan Efektivitas Implementasi Sistem Manajemen Mutu ISO 9001:2008, Universitas Widyatama*.

Antariksa, W.F., Surachman, Setiawan, M. (2014). *Pengaruh Penerapan Sistem Manajemen Mutu ISO 9001:2008 di Perguruan Tinggi terhadap Kinerja Balance Scorecard: Studi Kasus pada Universitas Brawijaya*. Jurnal Aplikasi Manajemen (JAM),12 (3), 399-406.

Arnia, M. (2001). *Evaluasi Kinerja Organisasi Pemerintahan Kabupaten Siak Propinsi Jambi.* Jurnal Pemda Siak, 10 (16), Agustus 2001.

Boiral, O. (2003). ISO 9000. *Outside the Iron Cage.* Organisation Science,14 (6), 720-737.

Briscoe, J.A., Fawcett, S.E. & Todd, R.H. (2005). *The Implementation and Impact of ISO 9000 among Small Manufacturing Enterprises*. Journal of Small Bussiness Management, 43 (3), 309-330.

Brown, A. (2013). *Quality: Where Have We Come From and What Can We Expect?.* The TQM Journal, 25 (6), 585-596.

Clare, Chow-Chua, Mark Goh & Tan Boon Wan. (2003). *Does ISO 9000 Certification Improve Business Performance?* International Journal of Quality & Reliability Management, 20 (8), 936-953.

Dale, B.G. (2003). *Developing, Introducing and Sustaining TQM*. Diakses pada 11 Oktober 2014.<http://www.blackwellpublishing.com, p1-33>

Gaspersz, V. (2005). *ISO 9001:2000 and Continual Quality Improvement.* Jakarta: PT. Gramedia Pustaka Utama.

Gingele, J., Childe, S. J. & Miles, M.E. (2002). *A Modelling Technique for Reengineering Business Processes Controlled by ISO 9001*. Computers in Industry, 49.

Hair, J. F., Jr. Black, W. C., Babin, B. J., & Anderson (2010). *Multivariate Data Analysis*. (*7th ed*). New Jersey: Prentice Hall. ISBN: 0138132631.

Hanna, D. (1998). *Designing Organisations for High Performance*. Sydney: Addison-Wesley Publishing Company.

Hery (2010). *Potret Profesi Audit Internal*. Cetakan Pertama. Bandung: PT. Alfabeta.

Indranata, Iskandar. (2006). *Terampil dan Sukses Melakukan Audit Mutu Internal ISO 9001:2000 Berdasarkan ISO 19011:2002*. Bandung: Alfabeta.

Jensen, M. & W. Meckling. (1976). *Theory of the Firm: Managerial Behaviour, Agency Cost, and Ownership Structure.* Journal of Financial Economics, 305-360.

Kettunen, J. (2012). *External and Internal Quality Audits in Higher Education*. The TQM Journal, 24 (6). 518-528.

Lafuente, E., Bayo-Moriones, A. & García-Cestona, M. (2010). *ISO-9000 Certification and Ownership Structure: Effects upon Firm Performance*. British Journal of Management, 21 (3), 649-665.

Lagrosen, S. (2005). *Effects of the Internet on the Marketing Communication of Service Companies*. Journal of Services Marketing, 19 (2), 63-69.

Lee, P.K.C., To, W.M. & Yu, B.T.W. (2009). *The Implementation and Performance Outcomes of ISO 9000 in Service Organizations: An Empirical Taxonomy*. International Journal of Quality and Reliability Management, 26 (7), 646-662.

Madu, C.N., Kuei, C. & Jacob, R. A. (1999). *An Empirical Assessment in the Logistics Function: An Empirical Study.* International Journal of Quality & Reliability Management, 16 (2), 166-180.

McAdam, R., Canning, N. (2001). *ISO in the Service Sector: Perceptions of Small Professional Firms.* Managing Service Quality, 11 (2), 80-92.

McLean, R. Andrew. (2006). *The Effect of the ISO 9001-2000 Certification on the Quality Management Systems of Suppliers to an Original Equipment Manufacturer*. Diakses pada 16 Agustus 2015 dari World Wide Web: <http://remote-lib.ui.ac.id:2073/docview/304923192/209CADA5E6BA4DDCPQ/1?accountid=17242>

Mei Feng, T., Terziovski, M. & Samson, D. (2006). *Relationship of ISO 9001:2000 Quality System Cerfication with Operational and Business Performance*. Journal of Manufacturing Technology Management, 19 (1), 22-37.

Nugroho, S. (1997). *Pengenalan ISO 9000 Series dan Seri SNI 19-9000-1992 Versi 1987 dan 1994*. Jakarta: Abdi Tandur.

Psomas, L. Evangelos, Pantouvakis A., & Kavetzopoulos P. Dimitros. (2012). *The Impact of ISO 9001 Effectiveness on the Performance of Service Companies.* Managing Service Quality, 23 (2), 149-164.

Rahman, Sham-Ur. (2001). *A Comparative Study of TQM Practices and Organizational Performance of SMEs With and Without ISO 9000*. International Journal of Quality& Reliability Management, 18 (1), 35-49.

Rahmawaty, Penny. (2010). *Dampak Penerapan Sistem Manajemen Mutu ISO 9001:2000 terhadap Kinerja Organisasi (Studi Kasus Pada Fakultas Ilmu Sosial dan Ekonomi Universitas Negeri Yogyakarta*. Diakses pada 10 Oktober 2014. <http://staff.uny.ac.id/sites/default/files/penelitian/Penny%20Rahmawaty,%20M.Si./Artikel%20Dampak%20Penerapan%20Sistem%20Manajemen%20Mutu%20ISO%209001.pdf>

Sawyer's, (2005). *Audit Internal Sawyer*, Edisi Kelima. Jakarta:Salemba Empat.

Sucipto (2003). *Penilaian Kinerja Keuangan*, Universitas Sumatera Utara.

Sugiyono. (2014). *Metode Penelitian Kombinasi* (*Mixed Methods*). Cetakan ke-5, Bandung: CV. Alfabeta.

Sumaedi, S., Yarmen, M. (2015). *The Effectiveness of ISO 9001 Implementation in Food Manufacturing Companies.* International Journal of Quality & Reliability Management. 27 (8), 916-937.

Sumarjan, N., Arendt, S. & Shelley, M. (2013). *Incongruent Quality Management Perceptions between Malaysian Hotel Managers and Employees*. The TQM Journal. 25 (2), 124-140.

Sun, Hongyi. (2000). *Total Quality Management, ISO 9000 Certification and Performance Improvement.* International Journal of Quality & Reliability,17 (2), 168-179.

Suroso, E. (2013). *Membangun Citra Polisi dalam Penanggulangan Tindak Pidana Pelanggaran Lalu-Lintas di Polres Batang*. Semarang: Universitas Diponegoro.

Terziovski, M., D. Power and A. Sohal (2003). *The Longitudinal Effects of the ISO 9000 Certification Process on Bussiness Perfomance*. European Journal of Operational Research, 146 (3), 580-595.

Venkatraman, N., Ramanujam, V. (1986). *Measurement of Business Performance in Strategy Research: A Comparison of Approaches*. Academy of Management Review, 11 (4), 801-814.

White, Margaret A. (1999). *The Relationship between ISO 9000 and Business Performance: Does Registration really Matter?* Journal of Managerial Issues, 146 (3), 580-595.

Wibowo. (2008). *Manajemen Kinerja*. Jakarta: Rajagrafindo Persada.

Wijanto, Setyo Hari. 2008. *SEM dengan LISREL 8.8*. Yogyakarta: PT. Graha Ilmu.