# Strategic Alignment Model between Information System and Technology Strategy, Empowerment and Good Governance on Managerial Performance (Study of Private Universities KOPERTIS Region II in South Sumatera)

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**Abstract** This study attempted to assess the application of quantitative approaches and hypothesis testing using 'Path Analysis' technique as an alternative approach to the performance of managerial leadership that can be used to achieve the goals in finding and determine the factors that influence and support the managerial performance. Analysis of the data that is used in this study consisted of descriptive analysis to look at the characteristics of the population that is netted in the study and path analysis. The sample of technique in this study is using proportionate stratified random sampling technique. The number of samples that is used as the respondent in the unit of analysis of this study is 130 head of private universities around KOPERTIS (Private College Coordination) in southern Sumatra region II. The results of data analysis shows that (1) the Information Systems Strategy of a significant and positive impact on performance managerial, (2) empowerment of human resources directly affects on performance managerial, (3) governance directly affects managerial performance.

**Keywords** Information Systems Strategy, Empowerment, Good Governance and Managerial Performance

# 1. Introduction

The role of higher education along with the quality improvement of higher education in Indonesia is to create excellence in human resource with response of the increasingly competitive era. [1] One of the long-term strategy concepts which is known as Higher Education Long-Term Strategy (HELTS) 2003-2010 is designed to increase the universities' independencies, constitution of the organizations, and nation's competitiveness. Realization in one of the concepts in HELTS, the constitution of the organizations, for example, can promote academic freedom and continuous improvement in change management that attains a higher standard and leads to customer satisfactions. Improving managerial performance and encouraging stakeholders (dean, lecturers, supporting staffs, and students) through many ways to work enthusiastically, effectively, and productively will lead to optimal work results. Therefore, managerial performance is a measurement of management in all organizational process elements that influence organizational performance. only individual not performance but also group performance.

The effort in optimizing managerial performance by aligning strategies between business strategy and information system and technology (IT) strategy is arranged to face a tough competitive business in higher education. The pioneer that argues the importance of new paradigm as a replacement of performance measurement terminology, postulates an analogy between managerial performance through planning cycles and plan-do-check and action cycles from. [2] University of California Higher Education Compact Performance Measures is principle Good governance; (a) law enforcement (b) transparency, (c) equality, (d) assurance, (e) vision, (f) accountability. (g) controlling, (h) efficiency, (i) effectiveness, and (j) professionalism. Affirms that current managerial performance in Indonesia is relatively lower since the majority of Indonesian universities are unable to create graduates that can adapt to what modern industries need. The reason why managerial performance in Indonesian universities is not optimal enough is because the strategic alignment between good governance strategy and IT strategy

cannot respond to the challenge that lies in the competitive education business.

In the scope of resources management in universities, there are abundant factors that influence managerial performance. Those factors are empowerment, IT, good university governance practice in institutionalized universities. Good university governance is predicted to be a determinant in supporting managerial performance where an university is expected to be governed professionally by applying good university governance. The empowerment of study program good governance is able to empower good management system orientates at education management principal based on certain regulation in Indonesia. The connection between managerial performance is adopted by new paradigm about modern education quality management related to empowerment strategy and active employee's.

In the context of previous paragraph, this research paper proposes strategic alignment model between IT strategy and good governance of managerial performance strategy (*Study* of Private Universities KOPERTIS Region II in South Sumatera).

# 2. Literature Review

#### **Managerial Performance**

Shani, et al. [14] "There are many factors that can affect the potential development and performance of teams. These elements can be clustered into six board categories: context, purpose, composition and diversity, structure, processes, and leadership". Gibson et, al. [6] The nature of managerial work is then to coordinate the work of individuals, group, and organizations by performing four management functions: planning, organizing, leading, and controlling. Colquitt, [3] Motivation also influences the Leadership (Power and Influence) in order to reach the job performance and organizational commitment. Talking about what the writer has menioned before, motivation is a critical consideration because job performance is largely a function of two factors: motivation and ability. Wagner argues that a system of work outcomes and efficiency of the program implementation by an organization are measured by managerial performance, which is conducted by appropriate procedure. According to him, obtained information is relevant in increasing the effectiveness and efficiency of programs and service provision. He concludes that the managerial performance covers all aspects that are used to make decisions, allocate resources, and improve service provision. Asserts that managerial performance is designed to improve skills of the employees and encourage them in any way to work enthusiastically, effectively, and productively according to proper working process in order to achieve optimal working output.

#### Information System and Technology Strategy

McFarlan et al. [10] Argue that the IT strategy is about all viable options that are centered on implementation and

utilization of technology based information system in a company. Lederer and Mandelow. [9] Affirm that the IT strategy is derived from organization strategy that covers: content linkage, which is referred to a consistency between business plan and IT plan, timing linkage, which is referred to decide if IT plan should be developed after, in between, or before the business plan is made, and personnel linkage, which is referred to the degree of the difference in participants' engagements in making business and IT plans. While Sabherwal, R. & Chan, Y.E. [11] Conclude that information system audit is a process of collecting and evaluating evidences to determine whether computerized application system has provided an adequate internal control system, covered all assets to protect data integrity, and effectiveness and presented efficiency on the implementation.

Prem Kumar and King [12] Argue that strategic alignment is a linkage between business plan and IT plan.

[4] Calhoun and Lederer (1990) conclude that education business investment plan and IT plan including product and corporate planning functions should be integrated with other business strategies in context of profit maximization.

[16] Khandelwal (2001) adds, "It is clear that for enterprises to achieve their corporate objectives the information systems supporting the business process have to give right management information, at the right time. To do this, IT in an enterprise must align with the organizational objectives (p23)."

#### **Human Resource Empowerment**

The keyword for the company's success in continuous quality improvement is optimal empowerment. Noe et al., in Tampubolon, P. Daulat [15] assert that empowerment is providing responsibility and authority to employees to make product development and other decisions, explain that empowerment is a form of decentralization that includes administration of responsibility to subordinates to make decisions and suggests an empowerment model that can be used to ensure the success of empowerment process in an organization. His model involves desire, trust confident, credibility, accountability, and communication developments.

[7] David, Gosling, and Vaneeta. Said empowerment is an outcome of a process that matches competencies, skill, and motivations with the required level of autonomy and responsibility in the workplace. [5] Derek Rollinson, David Edwards, and Aysen Broadfield, Said the empowerment is giving people the aouthority to make decisions in their own area of operations without the approval of someone above. Iddeally empowerment results in the delegation of power downwards and an expanded level of involvement for employees.

#### **Good Governance**

Good governance is a way, behavior, or method that used by universities to harness all given potentials and elements optimally. In order to achieve targeted vision and missions, argues that governance is a tradition of the institution that has autonomy in a country, including: (1) acknowledgement the process of choosing, supervising, and replacing the government, (2) government capacity to formulate and implement policies effectively, and (3) from the people and country of various institutions that organize the interaction between them.

*Michael Shattock* in Sulistyani. A. T [13] Good governance is congruent with an institution's aims, objectives and culture can make a significant contribution to it.

Governance is about power, relationships, and accountability-who has influence, who decides, how citizens and other stakeholders have their say, and how decision makers are held accountable. Good governance, in all its facets, has been demonstrated to be positively correlated with the achievement of better growth rates, particularly through the building of institutions in support of markets.

## 3. Research Methodology

#### **Research Purpose**

The purpose of this research is to find a model of strategic alignment of IT strategy, empowerment, and good governance towards managerial performance in private universities.

#### **Research Methodology**

The research method is causal survey by path analysis technique that will examine direct and indirect effect of each variable.

Explanatory survey method is used in this research. Direct observation is used on several private universities. Through this method, the writers do direct observation to some units and some universities and see directly who is served at this unit at private university in KOPERTIS Region II in South Sumatera.

#### **Sample and Population**

The population consists of all the leaders of private universities in the KOPERTIS area II of South Sumatera. The sample in this paper is taken with stratified random sampling technique. [8] The technique that is used to obtain 130 samples from population of 195 respondents is *Isaac and Michael* model (1981:192) in Ridwan and Engkos Achmad Koncoro (2008) paper.

## 4. Results Discussion

#### Model Structure Path Statistical Hypothesis Testing

Based on the proposed hypothesis, there are three coefficient paths that will be analyzed, that is:  $Pzx_1$ ,  $Pzx_2$ , and Pzy. The criteria state that if the coefficient path is less than 0.05, then the path is statistically insignificant.

A. Simultaneous Hypothesis Testing

$$H_0:zx1 = zx2 = yz = 0$$

 $H_a$ :At least there is a (i;k) 0, i = 3; k = 1 and k = 3 an, and reject  $H_0$  if F- value > F-table. The result of F-test is 82,019607 and F-table (0.05;3;126) is 2.68 and F-table (0.01;3;126) is 3.94. Thus, reject Ho. In other words, the structural equation that forms sub-structure of the first model is statistically significant. The equation is:

$$Z = 28.10 + 0.34*Y + 0.31*X1 + 0.21*X2, \text{ Error var } = 0.43, \text{ Rz} = 0.57$$
(1)

#### B. Individual Hypothesis Testing

**First hypothesis** shows that IT (x<sub>1</sub>) has direct correlation with managerial performance (Z). The result also demonstrates that the value of c.rfrom all hypotheses is above critical value with p-value  $\leq 0.05$ . Therefore, the value of c.r is statistically significant. The formulation for this hypothesis testing is H<sub>0</sub>: Pzx<sub>1</sub> -0 and H<sub>1</sub>: Pzx<sub>1</sub> > 0. The coefficient path of Pzx<sub>1</sub> is-0.31 and the calculated coefficient path is bigger than 0.05. Thus, the coefficient path is statistically significant. This shows that IT is positively correlated with managerial performance.

T-test is used to do significance test of IT coefficient path on managerial performance, this test is called theory trimming. Coefficient path is statistically significant if t-value > t-table. The result of t test obtained  $t_{count}$ = 3.75, while  $t_{tabel}$  = 1,960 at dk = 128 dan  $\alpha$  = 0,05, therefore  $t_{count}$ >  $t_{table}$  or 2.48 > 1,960. Thus, reject H<sub>0</sub>.In other words, this shows that IT affects managerial performance in private universities.

**Second hypothesis** explains that human resource empowerment affects managerial performance. The formulation for this hypothesis testing is  $H_0$ :  $P_Z x_2 - 0$  and  $H_1$ :  $Pzx_2 > 0$ . The coefficient path of  $Pzx_2$  is - 0.21 and the calculated coefficient path is bigger than 0.05. Thus, the coefficient path is statistically significant. This shows that leadership is positively correlated with managerial performance. Thus, the sixth hypothesis that argues human resource empowerment affects managerial performance can be accepted.

Theory trimming is also used to test the significance of human resource empowerment coefficient path on managerial performance. The result shows that t-value is 2.56 and t-table is 1.96 with dk = 128 and  $\alpha$  = 0.05. Therefore, reject H<sub>0</sub>. In other words, there is a relationship between human resource empowerment and managerial performance.

**Third hypothesis** shows that good governance also affects managerial performance. The hypothesis:  $H_0$ : Pzy- 0 and  $H_1$ : Pzy > 0. The coefficient path of Pzx<sub>2</sub> is- 0.21 and the calculated coefficient path is bigger than 0.05. Thus, the coefficient path is statistically significant. Thus, the fourth hypothesis that asserts good governance has a relationship with managerial performance can be accepted.

Theory trimming is used for this significance test and the result of t-test and t-table is 3.98 and 1.96 respectively with dk = 128 and  $\alpha = 0.05$ . Therefore, reject H<sub>0</sub>. In other words,

good governance affects managerial performance.

profit center; thus UPT of the universities can be optimal.

# 5. Conclusions

System Strategy/ Information technology influences positive significantly toward managerial performance is 0,656 with the parth coefficient is 0,22. This shows that an increase in IT system level leads to an increase in managerial performance level in private universities in South Sumatera.

Empowerment has a significant positive relationship with managerial performance with coefficient of 0.62 and coefficient path Pzx<sub>3</sub> of 0.21. This explains that an increase in human resource empowerment level leads to an increase in managerial performance in private universities in South Sumatera because there are several elements in human resource empowerment that managerial performance has such as moving human resource, financial management, time management, and rewards.

Good governance also has a significant positive relationship with managerial performance with coefficient of 0.66 and coefficient path of 0.34. This asserts that an increase in good governance level leads to an increase to leaders performance level. Thus, it increases the level of managerial performance in private universities in South Sumatera.

The research analysis as above implied that the impact of managerial performance model to alignment strategic will be stated by "It is clear that for enterprises to achieve their corporate objectives the information systems supporting the business process have to give right management information, at the right time. To do this, IT in an enterprise must align with the organizational objectives." It means that the alignment strategic are very important to build an organization, allied, and increase the competitiveness trough the empowerment of information system and technology to answer some opportunity of global competition. The model is also used to implement a Good Governance system in University preferably in case of subject and object research.

### Recommendations

Good governance can accommodate the management to make not only strategic but also operational decisions. Performance measurements and good governance in universities should have been acknowledge and engaged by employees in all layers, specifically about the connection of organization performance measurements with managerial working program objectives. Performance measurements should be accepted and trusted as benchmarks by users.

The role of IT, empowerment, and good governance in managerial performance has moderate impact on the fulfillment of employees' work and stakeholder in private universities. As a result, it has implication to make strong good governance through: (1) Human resource strategy by providing positive motivation to increase employees' competency and commitment, and (2) Business strategy to increase education service and institution's income through

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