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The Effect Innovation of Information Technology, Product, Work, And Service Toward Development Performance Academic Business Laboratory In Indonesia

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ABSTRACT

This study was conducted to compile a work plan and create an integrated laboratory information system and improve academic services at Uin Sunan Ampel Surabaya based on the implementation of work programs towards a world class university. The purpose of this research activity is to design and implement a system capable of providing work information for each manager of the integration laboratory and maximizing the utilization of the integration laboratory so that the use of the integration laboratory is better and more precise. The results of this research can form an integrated laboratory information system that can optimize the performance and effectiveness of scheduling the use of an integrated laboratory so that work productivity and laboratory empowerment can be optimized. The conclusion of this study is that Organizational Policy affects the Performance Improvement of the Academic Business Integration Laboratory and the Application of Information Technology in Improving the Performance of the Academic Business Integration Laboratory. Then the Information System has an effect on the Improvement of the Performance of the Academic Business Integration Laboratory and Work Innovation has an effect on the Improvement of the Academic Integration Laboratory Business Performance. In addition, Product Innovation has an effect on the Improvement of the Performance of the Academic Business Integration Laboratory and Service Innovation has an effect on the Business Performance Improvement of the Academic Integration Laboratory.

Keywords: Information Technology, Innovation, Work, Product, Services, Laboratory and Performance

INTRODUCTION

The laboratory has an important meaning in the development of teaching and the development of an increasingly complex curriculum. The existence of laboratories also plays a role in the advancement of educational institutions such as universities. Procurement of laboratories in every educational institution is a necessity and a necessity to improve the quality of the educational institution itself. From here educational institutions are required to optimize the use of laboratories, especially in universities. Laboratory management is a process of utilizing resources effectively and efficiently to achieve an expected target optimally by taking into account the sustainability of the function of the resource. To improve efficiency and effectiveness,

laboratories must be managed and utilized properly. No matter how good a laboratory is meaningless if it is not supported by good laboratory management. Laboratory management should be carried out relating to elements in management (Susilowati, 2012). The most basic laboratory management elements are 6 elements, namely: 1) planning, 2) structuring, 3) administration, 4) security, 5) maintenance, 6) supervision. These basic elements form the basis of laboratory development and development as a management function. The purpose of the laboratory management elements is to further improve research results, business partnerships and concern for the community, and its ability as an income generating unit that is the product of educational institutions such as schools and universities, both in terms of quality and quantity (Decaprio, 2013).

Laboratory management is related to managers and users, facilities and activities carried out in laboratories that maintain the sustainability of their functions. Basically laboratory managers and users consist of the head of the laboratory, supervisor, technical person in charge, laboratory coordinator, laboratory assistant, and practitioner. Laboratory management is a joint responsibility of both the manager and the user. Everyone involved must have the awareness to regulate, maintain and work for work safety. Organizing and maintaining laboratories is an effort to keep the laboratory functioning as it should, while maintaining work safety includes efforts to always prevent the possibility of accidents while working in the laboratory and their handling in the event of an accident. Laboratory management is said to be good if the laboratory management is in accordance with the minimum laboratory management standards that have been determined. The success of a good laboratory management is very influential on the quality of a laboratory. So far it has not been known how the quality of the management of the Uin Sunan Ampel Surabaya Integration Laboratory, whether the management is good or not, even though it is very important for the study program to improve the management of the integrated laboratory. The quality of the management of a Biology laboratory can be known through a personal laboratory evaluation covering students / students as volunteers, administrative staff, laboratory assistants, practicum lecturers and laboratory heads.

Therefore, researchers are interested in conducting research on the management of the Sunan Ampel Uin Surabaya Integration Laboratory. Based on the background description of the problem, the researcher intends to conduct research to find out about the management of the Integrated Laboratory, with the research title "Improving the Performance Capacity and Academic Services of the Uin Sunan Ampel Surabaya Integrated Laboratory Application-Based Work Program Towards World Class University". The formulation of the problem in this study are as follows: Does Organizational Policy affect the Improvement of Academic Business Integration Laboratory Performance, Does the Application of Information Technology affect the Improvement of the Integration Laboratory Academic Business Performance, Does the Information System affect the Improvement of Academic Business Integration Laboratory Performance, Does Work Innovation affect the Improvement of Academic Business Integration Laboratory Performance, Does Product Innovation affect the Improvement of Academic Integration Laboratory Business Performance, Does Service Innovation affect the Improvement of Academic Integration Laboratory Business Performance.

The aim of this research is : a. Test and Analyze Organizational Policies affecting the Improvement of Academic Business Integration Laboratory Performance.b. Testing and Analyzing the Application of Information Technology affects the Improvement of Academic Integration Laboratory Business Performance, c.Testing and Analyzing Information Systems affect the Improvement of the Integration Laboratory Academic Business Performance, d. Test and Analyze Work Innovation affect the Improvement of Academic Business Integration

Laboratory Performance, e. Testing and Analyzing Product Innovation influences the Improvement of Academic Business Integration Laboratory Performance, f. Testing and Analyzing Service Innovation affects the Improvement of Academic Business Integration Laboratory Performance. The results of research studies conducted are: Review of Previous Research, 1. Based on previous research conducted by Afwah (2012) entitled "Management of Biology Laboratories of SMA Negeri 1 Demak and SMA Negeri 3 Demak in Supporting the Implementation of Biological Learning", it was reported that the Biology Laboratory of SMA Negeri 1 Demak and SMA Negeri 3 Demak had been good in supporting implementation Biology learning, 2. Olufunke (2012) entitled "Effect of Availability and Utilization of Physics Laboratory Equipment on Students' Academic Achievement in Senior Secondary School Physics".

The results of his research are the optimal utilization of effective physics laboratory equipment in teaching physics, 3. Elvita Puspitasari, Nunung Nurhayati, and Elly Faculty of Economics and Business Bandung Islamic University (2016) with the title of the journal "Halimatusadiah Design of Accounting Laboratory Management Information System Design" with the following results: a. Management Information Systems Laboratory of the Faculty of Economics and Business, Bandung Islamic University is still not optimal, because the information system in laboratory management has not been implemented thoroughly. b. There are weaknesses in every system in the UNISBA accounting laboratory, these weaknesses are divided into two: A. Weaknesses of the General Systems Model, B. Weaknesses of the Special Systems Model: a) Practicum Registration System and Procedure, b) Systems and Procedures for Practicum Implementation, c) Practicum Evaluation System and Procedure, d) Certificate System and Procedure. c. The design of information systems uses the method of developing the Frame Work for the Application of System Technique (FAST) and the Unified Modeling Language (UML) system development technique which will later be displayed on the accounting laboratory website.

In developing the accounting laboratory management information system, it is necessary to improve the accounting laboratory management information system that is being applied: 1. General System Model Design, There are deficiencies in the Accounting Labotaorium Handbook so it needs to be added: Organizational Structure: Make a written Organizational Structure to be clearer in the assignment and Job Decription: written Job description is made and an explanation of the duties and responsibilities is made. 2. Special System Model Design, 1) Practicum Registration System and Procedure Fill out the online willingness list on all the website of the laboratory of accounting. 2) Systems and Procedures for Practicum Implementation Kasie Lab inputs and posts Present Attendance Forms. 3. Practicum Assessment Systems and Procedures : a. Provide evaluation on each practical material. b. Lab Assistant who teaches practicums that provide value. c. Kasie Lab inputs and posts values on the website. 4) Certificate Making System and Procedure, Practical certificate created by Microsoft Office Publisher. Lasmedi Afuan, and Ipung Permadi (2017) With the title of the journal "Design of a Web-Based Laboratory Information System (Syllab) in Informatics Engineering" with the results of the Laboratory information system in the informatics engineering study program having 3 user levels, namely: a. College student, b. Lecturer / Assistant, c. Administration. SiLab has been implemented in the IT Study Program, and can assist in the management of practicum activities at Podi IT Unsoed. As a suggestion, this system can be integrated in the future with the academic information system owned by Jenderal Soedirman University.

Nur Iskandar Zulkarnaen (2016) in the thesis "Management Information System Integrated Mipa Laboratory Services Uns With Quick Response Feature (Qr) Code Based on Web and Android" results achieved Based on research and discussion that has been described previously, it

can be concluded that it has succeeded in building a Service Management Information System Services with web-based and Android Quick Response (QR) Code features. This system can be used to process laboratory services that are available, easily, quickly and accurately. It is hoped that by using this system, the services available at the Integrated Mathematics and Natural Sciences Laboratory of UNS can be handled better, compared to the processing of services implemented previously, namely by manual means. Of all the studies studied by UIN Sunan Ampel Surabaya, it has its own characteristics in managing and planning the use of laboratories to support academic service activities so that this research is deemed necessary to be carried out comprehensively for the creation of effective, efficient and responsible service quality.

Background Teory

According to O'Brien (2014) that, "Information systems are a combination of people, hardware, software, communication networks, and data resources that collect, change and disseminate information within an organization". According to Laudon's opinion (2012) that, "Technically an information system (information system) can be defined as a series of interconnected components that collect (or obtain), process, store, and distribute information to support decision making and supervision within an organization" . From the definitions of the experts above, it can be concluded that the system is that the information system is a series of interrelated elements and components that are processed so as to produce quality information, in order to facilitate the decision making process. In the opinion of Mulyadi (2016: 31) that, "System development methodology is the steps that are taken by the system analyst in developing information systems". Meanwhile, according to Erlina, Sri Mulyani (2008: 28) "Method is the stages or rules for doing something". One such method is the System Life Cycle Development (SDLC), Sri Mulyani (2008: 28) said that, SDLC is a method used to develop a system. SDLC is a logic process that is used by a system analyst to develop an information system that involves requirements, validation, training and system owners.

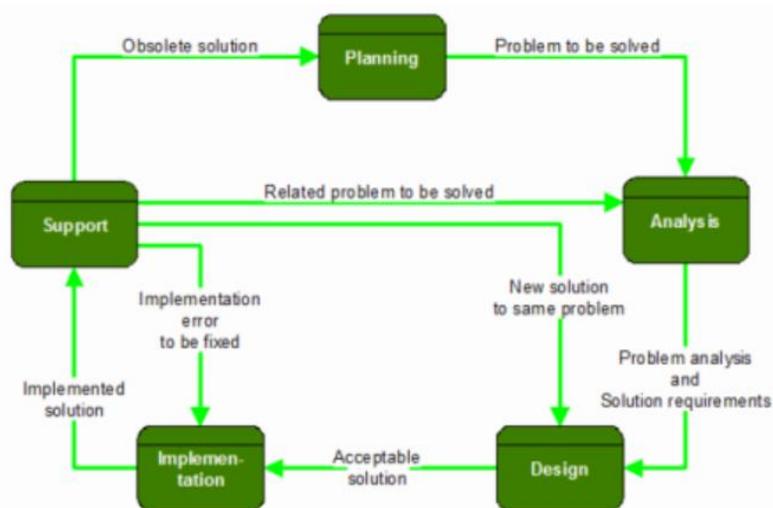


Figure 1. Stages of the System Life Development Cycle

Source: Jeffrey Whitten2004: 77

From the Figure 1 above it can be explained that brand awareness consists of four levels, namely: 1. System Planning (System Planning), 2. System Analysis, 3. System Design, 4. System Implementation.

Information Technology

In general, the notion of information technology is a study of the design, implementation, development, support or management of computer-based information systems, especially hardware and software. According to the ITTA (Information Technology Association of America), the definition of Information Technology is a study, design, implementation, development, support or management of computer-based information systems, especially in computer hardware and software applications. Information technology makes use of electronic computers and computer software to modify, store, process, protect, transmit and obtain information securely. Information technology is not only important as a means of communication (read: Understanding Communication) via electronics, but is an important tool that should be owned by a business as a means of coordinating and archiving important documents. Information technology is applied in order to manage information which is currently an important part due to the increasing complexity of management tasks, the influence of the international economy (globalization), the need for a faster response time, the pressure resulting from business competition. Of course, the existence of information technology has an important function. It is impossible that the existence of information technology does not have an important effect in life.

There are at least six functions of information technology, namely Capture, Storage, Processing, Transmission, Retrieval, Generating. The purpose of Information Technology is to solve a problem, open up creativity, increase effectiveness and efficiency in doing work. So it can be said that because of the need for problem solving, opening up human creativity and efficiency in doing work, is the cause or reference for the creation of information technology. With the existence of information technology makes human work easier and more efficient. In other words, because solutions, creativity, effectiveness and efficiency are needed in a work system, this information technology is then created. The benefits of information technology in daily activities are very important. This benefit can be used as a better life support because there is information technology that can help activities to be more effective and efficient. Information systems are any organized combination of people, hardware, software, communication networks, and data resources that collect, change, and disseminate information within an organization. (O'Brien, 2005) Information systems are a series of formal procedures in which data collected, processed into information and distributed to users. (Hall, 2006) From the definitions above it can be concluded that the information system is any regular combination of people, hardware, software, communication networks, and data resources that collect, process, store, and disseminate information into an organization to achieve certain objectives that are useful for processing data into information and knowledge.

Product Innovation

Product innovation can be defined as the efforts made by business actors who manufacture products to improve, enhance and develop products produced so far. Products that are developed are not always in the form of goods, but can be in the form of service improvements. According to Law number 19 of 2002, innovation is a series of developments by applying science and technology to a product. This product innovation can occur due to several things, including the presence of feedback from customers, a combination of things that previously existed, to new discoveries. This innovation process must be carried out continuously so that the product continues to develop, has improvements, until it reaches perfection, which can be done by utilizing science and technology. In life, an innovation in itself aims to make humans have an increased quality so that they have a lot of new abilities that were not previously owned. Likewise in a product, there

are certain goals to be achieved when innovating on the product. Some of the goals of innovating a product include: Improving Quality, Meeting Customer Needs, Creating New Markets in Society, Developing and Applying Knowledge and Insights, Changing Products or Services, and Increasing Product Efficiency. Innovating the goods created will make the business more competitive so that it will indirectly benefit the value of the company that makes it. Companies or business owners who make a product that continues to innovate will be able to beat their competitors. Companies that continue to develop by innovating will also be increasingly recognized by the public. For example, a cell phone company that innovates products by improving camera quality. Cameras on cell phones are becoming more and more important these days, especially as social media continues to grow. By following these developments, cellular phones with good camera capabilities will be increasingly in demand by the public. So that indirectly the value of the company in the eyes of the community also increases.

Work Innovation

With regard to employee work innovation, leaders are required to pay attention to the tendencies of each employee in terms of their proactive behavior. This is done so that leaders can classify employees and which parts can be given the right job design. Therefore, conditioning and designing jobs according to their capacities and intentions can improve employees' innovative work behavior, because innovative work behavior only occurs in employees who have self-initiative and implement it in real work. Innovative work behavior is the willingness of organizational members to introduce, propose and apply new ideas, products, processes and procedures to their work, work units or even the organization where they work. For organizational leaders, understanding employee behavior is very important, with the hope that leaders can predict and create productive employee performance. Meanwhile, proactive behavior is an anticipatory action taken by employees so that it has an impact on themselves and their environment. Related to this proactive behavior, it is necessary for leaders to understand and know each individual in their organization. This is done because each individual has different tendencies regarding their proactive behavior. If the leader knows about the proactive behavior of employees, the organization can present different methods for employees to improve their performance, especially the employee's innovative work behavior. The approach to job design methods with job characteristics (skill variety, task identity, task significance, autonomy and feedback) is the right way to approach individuals with high proactive behavior.

Service Innovation

Public service innovation is a new trend in Bureaucratic Reform which has been competed with certain rankings. Even so, public service innovation when delivering public service materials, still seems to be something new in the government structure. The hope that work is not mediocre will only be answered when an understanding of public service innovation is grounded in all service providers. Talking about innovation, of course, acceleration is the driving force. Public service innovation is a breakthrough in the type of public service, whether it is an original creative idea / idea and / or an adaptation / modification that provides benefits to society, either directly or indirectly. This innovation does not have to be a new invention, but also includes a new approach, expansion and quality improvement of existing public service innovations. Motivation to innovate does not have to be in competition, but previously worked with service standards, SOPs, SPM, so currently the development of public service patterns is carried out by innovating services. innovation must become a necessity in the pattern of providing public services to the community

by agencies, even to the changing patterns of service products. For example, services that used to be, people who went to the office, could be offered other services that interacted through online applications, as well as offers of service products in the form of letters or cards, it could be in digital form, for example the community only had to have a barcode number on a smart phone (smartphone).

Performance

Etymologically, performance comes from the word performance (performance). As stated by Mangkunegara (2005) that the term performance comes from the word job performance or actual performance (work performance or actual achievements achieved by someone) namely the quality of work results and the quantity achieved by an employee in carrying out his duties according to the responsibilities assigned to him. According to Notoatmodjo, performance depends on ability innate (ability), ability that can be developed (capacity), assistance for the realization of performance (help), material and non-material incentives (incentive), environment (environment), and evaluation (evaluation). Performance influenced by the physical quality of the individual (skills and abilities, education and compatibility), environment (including incentives and non incentives) and technology. In general, performance (performance) is defined as the level one's success in carrying out his job. Robbins (2001) explain that performance is a result achieved by work in his job according to certain criteria applicable to a job. Bastian (2001) states that performance is a description of the level of achievement of the implementation of an activity / program / policy in realizing the goals, objectives, mission and vision of the organization stated in formulation of an organization's strategic scheme. Anwar Prabu Mangkunegara (2000) argues that, performance (work performance) is the result of work in quality and the quantity achieved by a person in carrying out his duties accordingly with the responsibilities assigned to him. Furthermore Seymour (1991), performance is the actions or implementations of a task can be measured. Performance as one's success in implementing his job. Byar and Rue (1984) define performance as a degree completion of tasks that accompany one's work. Performance is what reflects how well an individual person meets job demands. From this definition it can be stated that employee performance is a form of someone's success to achieve a role or target certain that comes from his own actions. Someone's performance is said to be good if the individual's work can exceed that role or target predetermined.

Databases

Database is a collection of files that have a link between one file and another file to form a data building to confirm a company, agency within certain limits. (Kristanto, 2003) The database is a collection of data that are interconnected with one another, stored on computer hardware and used computer hardware and used software to manipulate it. (Jogiyanto, 2001) Also known as DBMS (Database Management System) is a complex software package used to manipulate databases. (Jogiyanto, 2001) From the understanding of information systems and databases above, it can be concluded that a database information system is a system that consists of a collection of interconnected files (in a database on a computer system) and a set of programs (DBMS) that allows several other users and or programs to access and manipulate these files (Fathansyah, 2001).

MyStructured Query Language

MySQL (My Structured Query Language) is a fast and powerful relational database management system. A row of data can make users to store, search, sort and get data very

efficiently. The MySQL server controls access to data to ensure that users can work at the same time, to support access quickly and to ensure that only isolated users have access rights. MySQL uses the language of SQL (Structured Query Language), which is a standard database query language for the whole world. MySQL has been duplicated since 1996, but the history of its development has been carried out from 1979. MySQL is available with an open source license, but commercial licenses are also available when needed. (Welling and Thompson, 2001).

PHP Hypertext Preprocessor

PHP is an acronym for Hypertext Preprocessor, which is a programming language based on codes (scripts) used to manage data and send it back to the web browser to HTML code. (Oktavian, 2010) PHP is a programming language for creating web server-side scripting nature. PHP allows you to create dynamic web pages. PHP can be run on various operating systems for example: Windows, Linux and Mac OS. Besides Apache, PHP also supports several other web servers, for example Microsoft IIS, Caudium, PWS, and others. (Ramadan, 2006).

PHP is a scripting programming language for creating dynamic web pages. Although it is known as a language for creating web pages, PHP is actually also used to create a command line application and also a GUI. (Zaki, 2008).

METHOD

This research was carried out through the stages of system development using the FAST (Frame Work For The Application Of System Technique) system development method and UML (Unified Modeling Language) development technique. System development method according to Whitten and Bentley (2004: 77) "Development method is a hypothetical methodology used to demonstrate the system development process". UML development techniques (Unified Modeling Language), is a system development technique that uses graphical language as a tool for documenting and specifying systems (Sri Mulyani 2008: 42). UML has many diagrams that are used to model data and systems, namely the Use Case Model consists of 3 (three) use case diagrams, narrative use cases, use case scenarios, and Activity diagrams. The analytical method used in this study is a structured analysis method using the technique of determining facts, which is a technique of collecting data and determining the facts in the learning activities of existing systems. The methodology used to obtain the required data is as follows:

Observation

This data collection method is used to obtain data related to laboratory information systems. In this observation activity, the writer collects data related to practicum activities, starting with the scheduling of practicum, key in practice, implementation, assessment, to the recapitulation of practicum teaching practice recapitulation. In addition to using the method of observation in collecting data needed in building a laboratory information system, the author also conducts a literature study. This literature study deals with the collection of materials regarding information systems, the stages of system development. In the process of designing this system is made to identify problems and plan solutions for managing the integration laboratory. Analysis In this process an analysis will be made of the management of the integrated laboratory that is running and how the new system will be created. The trial method is carried out by testing the laboratory information system repeatedly. This is done to get a near perfect information system and the system testing process to check whether the system is in accordance with the design that has been made or there are still errors from the system

RESULT AND DISCUSSION

The summarize command is used to display the number of Obs, Mean, Std Dev, Min and Max (Descriptive Statistics). This can be seen in the table 1 below.

Table 1. Display the number of Obs, Mean, Std Dev, Min and Max

Variable	Obs	Mean	Std. Dev.	Min	Max
a1	375	7.024	1.248297	2	9
a2	375	6.848	1.252096	2	9
a3	375	6.850667	1.180996	1	9
a4	375	6.581333	1.242377	1	9
a5	375	6.690667	1.249724	1	9
a6	375	6.525333	1.375404	1	9
b1	375	6.752	1.299872	1	9
b2	375	6.226667	1.449445	1	9
b3	375	6.024	1.131446	2	9
b4	375	6.08	1.21664	1	9
b5	375	6.109333	1.239412	1	9
c1	375	6.234667	1.046192	4	9
c2	375	6.093333	1.134926	1	9
c3	375	6.653333	1.224672	1	9
c4	375	6.056	1.251549	1	9
c5	375	6.213333	1.143376	1	9
c6	375	6.578667	1.246846	1	9
d1	375	6.730667	1.185696	3	9
d2	375	6.544	1.309186	1	9
d3	375	6.285333	1.308619	1	9

Regression Model

Make a Regression model to see Number of Obs, Prob> F, R-square, Adj R-Squared, Root MSE, Coef, Std. Err, t, P> | t |.

$$1. Y_1 = X_1 + X_2 + X_3 + X_4 + X_5 + X_6$$

Business Performance Organizations = Organizational Policies + Technological Application Information + System Information + Innovation Work + Innovation Product + Innovation Service The Interpretation. Number of Obs = 373, meaning the number of samples or observations is 373 samples. F (39, 333) means the F test on DF 39 and 333. DF 39 means the number of variables tested - 1, which is 40-1 = 39 variables. 333 is the number of observations - the number of variables, i.e. 373-40 = 333. Test F value is equal to 0,000. If the value <0.05 then the F Test accept H1 at a significance level of 5% or that means all the independent variables simultaneously have a significant effect on the dependent variable.

R-Squared is the Coefficient of Double Determination, meaning how much simultaneously all the independent variables can explain the dependent variable. Above the value is 0.5512 which means that all independent variables can explain the dependent variable by 55.12%. Then the rest is 100% -55.12% = 44.88% influenced by other variables outside the regression model. Root MSE is the standard error of estimate, said the regression model is good to be used as a forecasting model if the MSE Root, value 0.92276 <Standard deviation dependent variable (Y). In column t is a partial t test value. It is said to be significant at the 5% level if in the right hand column that is P> |t| or also called p value / significance, 0.001 <0.05. In the Coef column is the Unstandardized Beta Coefficient value. This beta coefficient value is used as a value in the regression equation. Where Y is the dependent variable and apha is a constant, Coef Beta times X1 is the 1st independent variable, Coef Beta2 times X2 is the 2nd independent variable, Coef Beta3 times X3 is the 3rd independent variable and so on plus e is an error.

T test (T test) is one of the statistical tests used to test the truth or falseness of the null hypothesis which states that between the two sample means taken randomly from the same opulation, there is no significant difference. (Sudjiono, 2010). This can be seen in the table 2 as below.

Table 2. Result Of Test T

Measurement						
a1 <- Penerapan~o _cons	1 (constrained)					
	7.024129	.0646097	108.72	0.000	6.897496	7.150761
a2 <- Penerapan~o _cons	1.060332	.0729899	14.53	0.000	.9172743	1.20339
	6.844504	.0646208	105.92	0.000	6.71785	6.971158
a3 <- Penerapan~o _cons	1.064558	.0690616	15.41	0.000	.9291994	1.199916
	6.847185	.0611524	111.97	0.000	6.727328	6.967042
a4 <- Penerapan~o _cons	.7899431	.0750367	10.53	0.000	.6428738	.9370125
	6.576408	.0640673	102.65	0.000	6.450838	6.701977
a5 <- Penerapan~o _cons	.9390927	.0759986	12.36	0.000	.7901382	1.088047
	6.689008	.0646732	103.43	0.000	6.562251	6.815765
a6 <- Penerapan~o _cons	.810669	.0843599	9.61	0.000	.6453266	.9760113
	6.520107	.0709873	91.85	0.000	6.380975	6.65924
b1 <- SistemInf~i _cons	1 (constrained)					
	6.75067	.0672819	100.33	0.000	6.6188	6.88254

Maximum likelihood estimation

Maximum Likelihood Estimation is a technique used to find a certain point to maximize a function, this technique is very widely used in estimating a data distribution parameter and remains dominant used in the development of new tests with the Structural SEM . This can be seen in the table 3 below.

Table 3. Structural SEM

	OIM		z	P> z	[95% Conf. Interval]	
	Coef.	Std. Err.				
Structural						
Penera~o <- Kebijakan~n	.6422518	.0778535	8.25	0.000	.4896618	.7948417
Inovas~a <- Penerapan~o	.3927814	.0570797	6.88	0.000	.2809073	.5046556
Kebija~n <- SistemInf~i	1.235673	.1683666	7.34	0.000	.9056808	1.565666
Inovas~k <- SistemInf~i	.7878939	.1425339	5.53	0.000	.5085325	1.067255
Kinerj~n <- InovasiKe~a	.3072464	.099887	3.08	0.002	.1114716	.5030212
InovasiPr~k	.2706143	.0994923	2.72	0.007	.0756129	.4656156
InovasiLa~n	1.231624	.2639229	4.67	0.000	.7143442	1.748903

The Interpretation of the table 3 with the estimation results show that the structural variable has a value of $P > |z| = 0.000$ which means that all variables have an influence on other variables. Loading Factor Estimation is intended to produce a significant or no influence value of the independent variable on the dependent variable.

The Figure 2 shows how the image generates the estimated loading factor value in the STATA application.

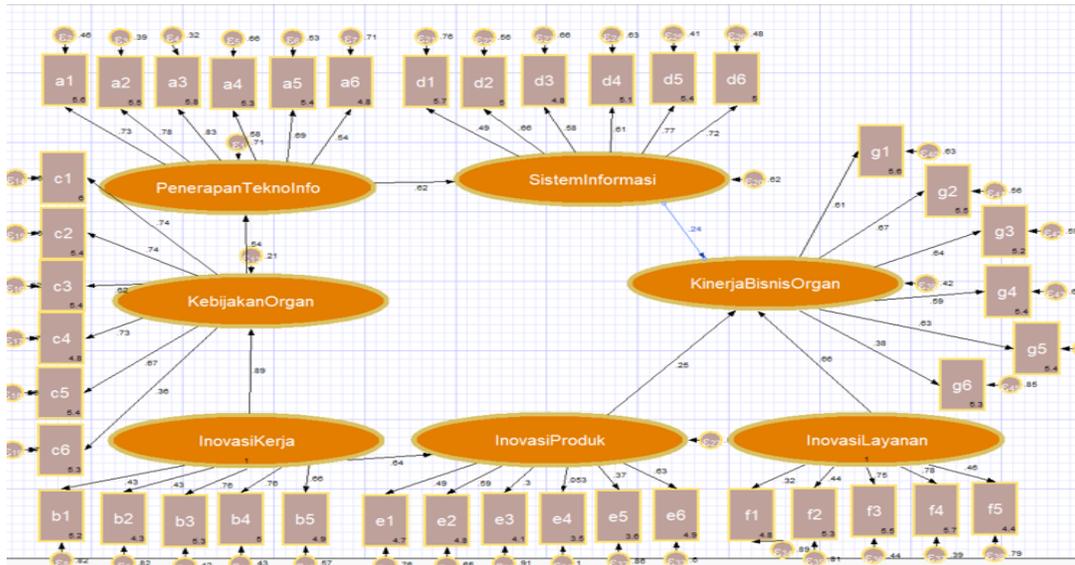


Figure 2. Estimating Loading Factor

The Interpretation of the figure 2 as follows : a. loading factor (click on arrows) Z value see sig or not (> 1.96) [$1.96 = 5\%$] of the estimation results show that z value is 3.211 meaning this value is greater than [$3,211 > 1.96$] then it means that the variable has an influence or significant. b. Standardized beta squared to see the correlation (contribution to the intended variable) $3.0722 = 9,437$ (94.37%) means that the Information System variable contributed 4.37% to the Organizational Business Performance. c. Likewise for the value of loading other variable variables have an influence with values above > 1.96 . which means that all variables have influence even though they mediate.

Measurement Model

Measurement models are often called Outer models, showing how manifest / observer variables (indicators) represent latent constructs to be measured, namely by testing the validity and reliability of latent constructs. This can be seen in the Figure 3 as below.

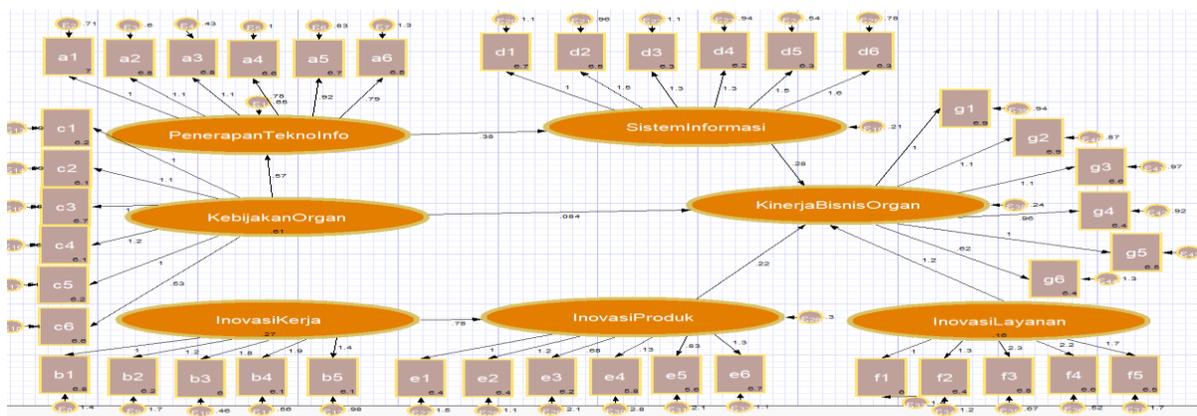


Figure 3. Measurement Model

The Interpretation of the figure 3 is for the correlation value on each indicator tap to the construct must be in the range of 0.00-1.00, if a value is formed outside that number then make sure that indicator does not meet to be included in the test of influence or estimation. From the estimation results formed indicator values in each construct vary so that elimination needs to be done on indicators that are not included in the standard range or do not meet the estimated value of 0.00-1.00.

The results of measurements for the value of the t test are all 0,000 which means that the partial variable test has an influence on other variables. Intercorrelation is a linear relationship or a strong relationship between one independent variable or predictor variable with other predictor variables in a regression model. This can be seen in the table 4 as below.

Table 4. Result of VIF

Variable	VIF	1/VIF
a3	3.28	0.304478
a2	2.82	0.354224
b4	2.76	0.361929
a5	2.65	0.377412
a1	2.63	0.380600
g2	2.54	0.394224
b3	2.47	0.404347
g3	2.43	0.411782
f3	2.39	0.419107
b1	2.37	0.422719
c1	2.35	0.424970
a6	2.34	0.426637
d5	2.33	0.429803
d6	2.28	0.438043
c2	2.27	0.440553
c4	2.27	0.440946
g4	2.25	0.445238
f4	2.14	0.468013
c5	2.12	0.472567
g5	2.06	0.486511
b2	2.02	0.494723
b5	1.98	0.504523
e6	1.97	0.507695
c3	1.89	0.528056
d2	1.88	0.532186
f1	1.79	0.557614

The Vif test is used to determine whether data regression contains multicollinearity or not. If the value of vif is less than 10 then it can be said that there is no multicollinearity and vice versa if it is greater than the value of 10 then it contains multicollinearity. From the test results show that all vif values verada at values below 10. The Heteroscedasticity Test is a test that assesses whether there is a variance in residual variance for all observations in a linear regression model. In the Heteroscedasticity Test if the significance value (Sig.) > 0.05 then there is no symptom of Heteroscedasticity. From the output above, it appears that there are indicator variables that experience symptoms of heteroscedasticity because of Sig. > 0.05.

Information Technology Functions

Of course, the existence of information technology has an important function. It is impossible that the existence of information technology does not have an important effect in life. There are at least six functions of information technology, namely Capture, Storage, Processing, Transmission, Retrieval, Generating. The following is a description of the six functions of information technology, namely: 1. Capture. Capturing here can be interpreted as input. For example, receiving input from a mic, keyboard, scanner, and so on. Capturing feature may also be familiar when you use it to store certain information. 2. Function of Information Technology as Processing. This information technology function compiles detailed records of activities, for example receiving input from a keyboard, scanner, mic and so on. With Processing, you will find it easier to process your files and data. 3. Processing or processing the input data received to become information. Processing or processing of data can be in the form of conversion (converting data into other forms), analysis (condition analysis), calculation (calculation), synthesis (combining) all forms of

data and information. With this function it will definitely make it easier for users. 4. Information Technology Function as Generating. 5. The generating function is where technology acts as a tool for organizing information into a form that is more directed and easy to understand. Simple examples are charts and tables. 6. Information Technology Function as Storage. This information technology function records or stores data and information in a medium that can be used for other purposes. For example, saved to hard disk, tape, floppy disk, CD (compact disc) and so on. 7. Information Technology Function as Retrieval. This information technology function is to trace, retrieve information or copy stored data and information, for example looking for suppliers who have paid off and so on. Sometimes the stored data is difficult to find because it is too full with this function to make it easier for the user and also save time. 8. Information Technology Function as Transmission. This information technology function sends data and information from a location to another via a computer network. For example, sending sales data from user A to other users. So that we don't need to copy one by one just by sharing it with each other.

Benefits of Information Technology

The benefits of information technology in daily activities are very important. This benefit can be used as a better life support because there is information technology that can help activities to be more effective and efficient. These benefits can be classified based on their needs such as:

For Education. With the existence of information technology in education, especially computers, making students more effective in learning. Computers are a means that make it easier to foster student creativity as well as a source of information. For Industry and Manufacturing. Information technology can help design a product design that will be issued to the industry and can control production machines with good precision. Moreover, as we know, industry needs fast things for large production. For Business and Banking. With information technology, it can assist in transactions, store files more safely and a more advanced banking system. And access can be controlled easily with technology alone. For the Military. With advanced information technology, it can be used for navigation on a submarine, controlling a spacecraft with a rudder or without a rudder. With the presence of military technology, it can also provide access when there is a critical situation. For Engineering and Knowledge.

Information technology can be used in studying the structure of soil, wind and weather. And can help in calculating. Currently, access to knowledge is scattered everywhere and can be accessed easily by simply using the internet network. Likewise in the field of engineering and certain projects. For Medicine. Can be used in diagnosing a disease and taking pictures of all organs of the body with a computer. Even technology is an inseparable part of today's medical fields such as: scans, radiology, and ultrasound. For Government. Information technology can be applied in processing data and information aimed at the public. Can improve relations between government and society. So that what happens in a certain area can be known quickly using technology. For Fun and Games. Computer technology can be used to make animation, advertising, graphic design and also audiovisual to make it better and more interesting. Even now, many programmers are certain at the same time creating jobs for him. For the Criminal Sector. Technology can make it easy for officials to solve problems, it can easily detect traffic violations and fingerprints. Even cybercrime-class crimes can easily be traced through technology.

The explanation above is certainly complete enough to add to your insight about information technology. The components used in information technology include Hardware, Software, Brainware (intelligence that exists in humans / users), Data, Information, and Knowledge. All these components have become one unit to realize this information technology. The number of positive

impacts given by the existence of information technology has a negative side. The negative impact is such as the younger generation who are increasingly addicted and dependent on the presence of this technological development. Therefore, in the midst of advancing technological developments you should have responded wisely. This is done to avoid these negative impacts.

CONCLUSION

The conclusion of the research results is that: Organizational Policy influences the Improvement of Academic Business Integration Laboratory Performance, Application of Information Technology affects the Improvement of Academic Business Integration Laboratory Performance. Information Systems affect the Improvement of the Integration Laboratory Academic Business Performance. Work Innovation affects the Improvement of the Integration Laboratory Academic Business Performance. Product Innovation affects the Improvement of Academic Integration Laboratory Business Performance. Service Innovation affects the Improvement of Academic Integration Laboratory Business Performance.

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