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IT Valuation Deployer Information System Implementation at PT Telkom Indonesia Access B3E Approach

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ABSTRACT

Telkom Akses is a subsidiary of Telkom which is a state-owned company in Indonesia. Telkom Akses is engaged in telecommunications, especially the construction of Optical Fiber, Construction to Design Data and Inventory activities. In carrying out optical fiber development, Telkom Access has an information system called Deployer. Deployer's information system documents all activities from surveying, construction to inventory. This involves all parts of Telkom access, especially in the construction division. To get valid information about this information system, it is effective and efficient for the company as well as the feasibility of developing it. So, this study was conducted entitled "IT Valuation Implementation of Information Deployer Systems at Pt Telkom Akses Indonesia with the B3E Approach". This research was conducted with the B3E method with the aim of getting output in accordance with expectations including the effectiveness and efficiency of this information system, feasible to be updated or not, facilitate Telkom access in monitoring a project or not. After doing research on this information system, the data we get from the results of the questionnaire states that this information system is very helpful for Telkom Access in reporting and monitoring a project. It can also be concluded that this information system is effective and efficient for Telkom Access and deserves to be developed and updated.

1. Introduction

Today, competition between companies increasingly fierce and competitive force companies to continue to innovate and provide the best service for their customers. Information needs is an important part in business activities. Telecommunications Sector is one of the factors supporting the success of the development, because telecommunications is one of the media is very important. To increase the demand for telecommunications services is the company engaged in the telecommunications industry have to do with good quality enhancement and quality.

PT. Telkom Access (PTTA) is a subsidiary of PT Telekomunikasi Indonesia, Tbk. (Telkom) which is wholly owned by Telkom. PTTA engaged in the business and the provision of construction services and managing network infrastructure. Now Telkom is focusing build optical fiber-based backbone network as well as Internet Protocol (IP). PTTA established by Telkom for the construction of the fiber optic cable which is part of the Indonesia Digital Network (IDN) in 2015. As part of its strategy to optimize its services. Optical fiber cables in FTTx networks (Fiber To The X) is the basic foundation of high speed internet services that open new challenges and opportunities for operators to create new services for customers.

In the construction field PTTA launching an order management information system called "Deployer" deploy short order. Deployer itself was launched at the request of GM construction in order to monitor all incoming orders for PTTA development into an information system.

Deployer is an integrated information system with other information system to display the valid monitoring and updates to the user. There are some activities that can be monitored in the system information from the deployer start booking until ready to sell a production tool Telkom. In this case we

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will measure Deployer information system in terms of access Telkom effective and efficient through IT Valuation B3E.

2. Theory

2.1. Framework BtripleE

According to Van der Zee, the measurement of aggregate cost and effectiveness in the main, jointly called by value, of all IT (including IT to support business processes and reconfigure business networks, IT products and services, IT infrastructure and IT research) related the level of business management within the framework of BtripleE. [7]

2.2. Measuring the Business Value of IT

According to Van Der Zee, an organization can improve the performance of short-term and long-term in several different ways. [7] There are three important things in relation to the application of IT:

a. Miningkatkan financial performance through the traditional IT applications to improve the effectiveness and efficiency of an organization
b. Improving business performance through innovative IT applications
c. Improve performance with reconfigure strategic business network involved in the manufacturing and delivery of products and services, or even wholly replace it with IT, thereby reconfiguring the business scope.

Measurement business value of IT deals with the relationship between the cost of IT and its contribution to the improvement of organizational performance as measured in three dimensions include:

a. Financial performance: measured by financial indicators such as profitability, productivity and income
b. Business performance: measured by non-financial indicators such as competitiveness, new product sales, product development lead time, manufacturing lead time, distribution lead times, customer satisfaction.
c. Strategic performance, measured * with indicator corresponding to the management objectives.

There are three dimensions of relation between IT costs with business value.

2.3. Measuring the Effectiveness of IT

According to Van der Zee, the next level within the framework of BTripleE determining the value of IT as measured by the contribution of IT to the improved performance of business processes, operations and personnel. [7] Striving to optimize the effectiveness of IT is becoming increasingly important Because of the dependence of growth of IT and IT Due to increasingly interwoven into every aspect of business.

There are nine factors the effectiveness of IT has the potential to improve the effectiveness and efficiency of the implementation of business processes and business activities consist of:

a. Automational: mengeliminiasi labor process
b. Informational: sending information to customers as a service or product, and obtain information on the process for management purposes
c. Sequential: change the order process or enabling parallelism
d. Tracking: monitor the status of objects and processes
e. Analytical: increase analissis of information and decision-making
f. Geographical: mengkoorindasi a separate process within
g. Integrative: mengkoorinasikan between tasks and processes
h. Intellectual: storing and distributing intellectual assets
i. Disintermediating: eliminate the bureaucracy of the process in the information process.

2.4. Establish IT performance Supply

According to Van der Zee, measurement activities are difficult to evaluate berwujudnya Because the character is not to be overcome by membuatn these activities become more visible and measurable. This can be done by analyzing the supply of IT processes, factors of influence, such as s umber power, workflow and work activities within its structure, dependencies, key parameters such as cost, time and effectiveness. [7]

3. Research Methods

Methods of research to be conducted in this analysis are:

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a. Methodology Data Collection: Data collection is done can be done by direct observation of the deployer's information system. Studying the existing business processes as well as our menyebarklan dilamanya questionnaires to users who use this information system.
b. Methodology The analysis and evaluation were performed using BTripleE, this analysis comprises three parts diataranya: Business Value of IT Effectiveness of IT, Effectiveness and Efficiency of IT Supply

4. Results and Discussion

4.1. Busines Value Of IT

Business performane through IT can be obtained by linking the cost of IT and its contribution to the improvement of operational performance of the implementation of Telkom Access Project.
In making the deployer information system does not use too significant cost. But for the real benefits can be felt by the user.
Making the Deployer information system created by the internal IT team Telkom access by using the cost of hosting the potluck. For details of the cost of making deployer or less like this:

a. product Quality
Before the implementation Deployer:
Telkom project activities are usually carried out on a contract basis. Would not we do before a contract that clearly rising. However, with regard to the urgent need finally happened project with the title of non-contractual. The project was undertaken scattered and unclear be paid by Telkom or not. Or already contracted or not. So that non-contractual coverage of the project undertaken by Telkom access is so unclear. While taking in warehouse material to be hampered because there is no clear project id. So that the interests of sales was so hampered by this small project is hampered progress or even not implemented.

After implementation Deployer:
Nowadays after Deployer information system implemented in project management at Telkom access there are various advantages that have been learned and can be summed facilitate Telkom access to non contractual project documentation on Telkom Indonesia.
There are various advantages over the deployer will be:
a) Clear documentation on each project yagn access Telkom non-contract
b) Making material from the warehouse so much easier because there is a project id provided in this deployer
c) Payment of the project is done so it definitely paid by Telkom Indonesia for a complete documentation.
d) Control over non-contract project running so clear progress for access Telkom and Telkom Indonesia as stakeholders

b. System integration
Before the implementation Deployer .:
Before implementing Deployer Telkom still has no access information systems in documenting project memumpuni non contract of Telkom. Moreover, this access Telkom 3 years old since its establishment. This results in projects abound with large numbers of Telkom Indonesia so uncontrolled.
After implementation teammate Audit Management System:
Deployer information system can be accessed through the website, so that all employees can access the company Telkom simultaneously access and control projects in the information system at any time.
a) The level of competence of manpower
With the implementation of the system Deployer on Telkom access, non-contract project activities undertaken to access Telkom Telkom Indonesia became more restrained and controlled progress. So that employees access Telkom and Telkom Indonesia understands and can use this information system properly, then the employee will be provided user training for officials on the use of the system every Deployer.

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With the training, workforce competencies will increase as more detailed understanding of the company's business processes and the ability of the user to analyze the causes and to provide suggestions on the problems in the process of running a business. With the increasing competence of man- power, access Telkom's performance will be more efficient.

4.2. Effectiveness of IT

Table 1,
Rank Rank Achievement Comparison with Targets

Statement	Rank Target	Rank Achievement	Description	Recommendation
*deployer*memspeeding up the completion of tasks related to documentation.	Very High	Very High	This is because Deployer user feels that the information entered on the application deployer is perfectly adequate for documenting that aim to create reports	Target achieved. But on the documentation is to appeal again to the user input information into the deployer is valid. So that. Such information is more actual and accurate.
deployer mampu produce the required output	Very High	Very High	This is because Deployer provides the expected output. But if there are anomalies in it then the information must be confirmed back to the pic each project masign	Improve discipline in the input information in the deployer
*deployer*mEnhancing productivity performance.	High	High	It is caused by the absence of prior information system deployer. Therefore, when there deployer progress so much faster because it helps in documentation for a project progress report.	Developed back to this deployer so that work can be done in parallel in each of its state. In other words, no waterfall.
The data contained in accordance with the actual Deployer	High	Medium	This happens sometimes in deployer user negligence that fact is not in accordance with the progress in the field that diinpkan in deployer.	Be disciplined in the use of this information system. In order deployer the reference to reporting progress to management.
*deployer*memberikan information (reports) are more accurate and faster	High	low	This happens sometimes in deployer user negligence that fact is not in accordance with the progress in the field that diinpkan in deployer.	Be disciplined in the use of this information system. In order deployer the reference to reporting progress to management
Data processed by the Deployer produce information as needed	Very High	Very High	To create reports and dashboards for management, deployer is sufficient to provide the information as needed.	The commitment to keep the information entered into the deployer still valid and accurate. So informasiny own as needed.
*deployer*mampu provide data according to the needs	Very High	Very High	The data provided is in accordance with that required to make reports and dashboards in deployer.	The commitment to keep the information entered into the deployer still valid and accurate. So informasiny own as needed.

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Statement	Rank Target	Rank Achievement	Description	Recommendation
*deployer*memberik an access to the information needed	veru High	Very High	access has been granted to each user in accordance with its respective portion	To be precise target information for each user should then for each user is required to discipline the deployer web updates and ensure the validity of such data
The right of access to information in the Deployer already been allocated to the correct user	High	High	Permissions for each user should have been allocated to the target and in accordance with the role and jobdesk respectively.	To be disciplined in using the user deployer then required every user should not share user to any person for the benefit of one individual.
*deployer*very clear and easy to understand.	High	High	*deployer* is very easy to understand and easy to use for menus in deployer just upload the project and approved the project only.	
Interaction with Deployer does not require much effort	High	High	*deployer* is very easy to understand and easy to use for menus in deployer just upload the project and approved the project only.	
*deployer*very easy to use.	High	Very High	*deployer* is very easy to understand and easy to use for menus in deployer just upload the project and approved the project only.	

4.3. Effectiveness And Efficiency Of It Supply

Measurement of Effectiveness and Efficiency of IT Supply has included IT Development Management, IT Infrastructure Management, and Client Support.

a. ***IT Development Management***

In terms of IT Development Management, Telkom access has a special division to handle the information system therein. Namely Telkom Access division.

b. **Customer Perspective:**

Rate IT Development Management of Customer Perspective can be seen from the following areas:

1) Number of issues or problems that the user encountered when using the current application issues commonly encountered in the deployer is the subject of traffic so the deployer to be very slow. It is caused by users who access the deployer in time bersamaanuntuk melakukang Deployer report that caused the application to be slow.
2) Data and information in the reports made by the deployer does not correspond with the actual conditions in the field. It is caused by users who are less disciplined. So it is not updated on the progress of the projects themselves
3) Data and information in the reports made by the deployer less accurate. Because sometimes incorrect user input into application or is not entered. So that information about the project is not in accordance with the pitch tersbut
4) Limitations platform for information system is only for Windows users only
5) Limitations edit function for the user. So it must be edited by its own IT division.

c. **Internal Perspective:**

IT Development Management Assessment of Internal Perspective can be seen some of the following:

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1) The execution of the project that can not be paralalel deployer. Since each project are the waiting of the state to its state with PIC respectively in each of its state.
2) Traffic constraints that often occur every hour from work.

5. Conclusion

After IT Valuation Against Deployer Information System Telkom access, it can be concluded that:

a. Business value of IT

Implementation Deployer at. Telkom Access has a good impact. In the implementation of information systems Deployer has been able to increase productivity in the work on the project. And may provide better control project as recorded in a system.

b. Effectiveness of IT

1) user Perspective

Deployer has had IT Effectiveness criteria. This is shown by the user to be more effectively the work for non-contract project work better controlled by this information system.

2) IT Supply Perspective

Deployer has been able to meet the criteria for effective IT Supply Perspective. This is evidenced by the results of an interview with one of the managers of West Java Access Telkom said that the application Deployer can create reports with a very fast, easy to repair because it is done by IT Telkom Insource own access.

c. Effectiveness and Efficiency of IT Supply

IT Supply in Telkom Access, Self-effectively and efficiently. This was due to its own Deployer made and is quite right on target with expectations the output of the system is appropriate. However, it must be cultivated man power that discipline in inputting information on deployer for data and information on the above results generated reports get into more actual and ekurat

THANK-YOU NOTE

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6. Reference

[1] Akses, P. T. (2014). sekilas-perusahaan. Retrieved from telkomakses.co.id: http://telkomakses.co.id/
[2] Brender. (2006). Handbook of Evaluation Methods in Health Informatics. USA: Elsevier Academic Press.
[3] Indonesia, T. (2012). http://e-learning.telkom.co.id/.
[4] O'Brian. (2008). Management Information Systems. New York: McGraw-Hill.
[5] Prahasta, E. (2002). Sistem Informasi Geografis : Arc View Lanjut Pemograman.
[6] Sugiyono. (2013). Metode Penelitian Bisnis. Bandung: Alfabeta.
[7] ZEE, H. (2013). Measuring the Value of Information Technology. USA: Idea Group Publishing.

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