

DRAFT

User Needs and Effectiveness of IT Project

Hartono Ari Susetyo

The Supreme Audit Board of The Republic of Indonesia

hartono_ari_s@yahoo.com

***Abstract.** Investment in IT is costly and should support the organization's business because the IT infrastructure will be used to reach the organizational goals. There are some evidences that IT project could not meet the business needs. The objectives of IT project should be able to link with the organization's goals. That's why the IT strategy should align with the business strategy. Some factors can cause the failure of IT projects, such as inappropriate user needs. The inappropriate of user needs can be caused by lack of IT literate in the top level management, budget constraints and bureaucracy. The effectiveness of IT project could be evaluated by user satisfaction and customer satisfaction. Effectiveness in IT projects can be measured by linking with the achievement of organization's goals that supported by IT infrastructure and the satisfaction of everyone.*

DRAFT

User Needs and Effectiveness of IT Project

Almost all business now depend on information technology, from the simple way such as writing letters using personal computer to worldwide complex business activities such as telecommunication or banking that can't be done without computers. IT could improve the productivity through streamlining of process and enhances efficiency and effectiveness business activities through connectivity it offers. The information technology has become business enabler and requirement to gain competitive advantages. IT makes it possible for business to grow by access to new markets and new partners. It makes the increase of dependence on information and the systems that deliver the information.

For certain organization running big business, the use of information is required although the cost of investment is relatively high. Because the investment in IT is costly it should support the organization's business because the IT infrastructure will be used to reach the organizational goals.

Sometimes the top management expects that reaching organizational goals can be done using high technology such as sophisticated hardware and software. They do not understand which and what level of technology that suits to their business. The business that needs small or medium level of IT should not use very sophisticated IT because the revenue might not match the cost of IT investment and operation.

Some research shows that organizations have difficulties with IT project to complete on time or on budget, many are cancelled before completion or not implemented or implemented but could not meet the business needs. The project team, the suppliers, the customers and other stakeholders can all provide a source of failure. One of the primary causes for the failure of IT project is lack of executive support and user involvement.

It's important to define the business needs clearly and align it with the IT Project. The objectives of IT project should be able to link with the organization's goals. The IT Strategy then defined from business strategy and the IT Project referred to IT Strategy and involve the person who will use the system to make sure that what they need are reflected in the project.

Effectiveness could be defined as success in achieving a given goal or getting things done. Effectiveness in IT Project could be meaning the system and application is capable to accommodate the business needs and user needs to achieve the business goals. It means that user and customer that using the system and application are satisfied.

User and Customer Needs

DRAFT

Customers of IT are part of stakeholders of the organization that gain benefit from the use of IT or satisfy with the performance of the organization's performance supported by IT. What customer's needs usually good services such is reliable information provided quickly, simple and easy procedures for any transactions. Customer needs could be got from asking or observing what kind of information they need and what level of services they expect. The staffs of customer division are expected to understand the customer needs and formulate it.

User is one of the stakeholders that could be mean as the person in the organization from top level management to lower staff that using the IT infrastructures in the daily operation business. There are various needs among the users, sometimes conflicting, and difficult to combine toward user requirements. It needs person or management that understands the overall business need, organization's goal, culture and behavior of the staff.

It's sometimes hard to define the user needs and customer needs in order to satisfy everyone. For example, there is some kind of security features in the system and application that user needs to secure the transaction or organization's assets, and it affect the procedures that customer has to be done, and affect the duration time of services.

Constraints in the Public Sector

Sometimes, IT project in the public sector could not meet the organization's goal and the project is useless or abandoned. Some factors can cause the failure of IT projects, such as inappropriate user needs. The inappropriate of user needs can be caused by lack of IT literate in the top level management, budget constraints and bureaucracy.

Not all of the top level managements in public sector are IT literate. They accept the IT project even they do not exactly what the organization, customer and user need. Each organization develops their own system and application and finally difficult to integrate all the system and application to produce the reliable information at nation level.

Mostly project in the public sector including IT project, particularly in Indonesia, has constraint of budget. Multi year budget for IT project could cause the technology become obsolete and there might be some changes in the user or customer needs that affected from outside conditions.

The bureaucracy could cause missing the completion of IT project on time. The person who in charge of the IT project sometimes could not daily involved because of the routine works, and the some responds that has to decide quickly could not be made. Level of approval in the bureaucracy takes time and delaying the action to do next in the phase of IT project.

DRAFT

Effectiveness of IT Project

IT governance is a structure of relationships and processes to direct and control the enterprise in order to achieve the enterprise's goals by adding value while balancing risk versus return over IT and its processes. IT governance provides the structure that links IT process, IT resources and information to enterprise strategies and objectives. Furthermore, IT governance integrates and institutionalizes good (or best) practices of planning and organizing, acquiring and implementing, delivering and supporting, and monitoring IT performance to ensure that the enterprise's information and related technology support its business objectives. IT governance thus enables the enterprise to take full advantage of its information, thereby maximizing benefits, capitalizing on opportunities and gaining competitive advantage. Some of key performance indicators in IT Governance are improved cost-efficiency of IT processes, increased satisfaction of stakeholders and improved staff productivity and morale.

Refer to Control Objectives, in managing projects, the organization's project management framework should provide for participation by the affected user department management in the definition and authorization of a development, implementation or modification project.

There are various approaches to system development - traditional information system development, purchasing and modifying a package software system, prototyping and rapid application development, and less formal end-user development. Although each approach is unique, they all have similar steps that must be completed. For example, each approach must define user requirements, design programs to fulfill those requirements, test to verify that the program works as intended, and implement the system.

The system development process can be broken down into four phases - planning, development, implementation and maintenance. The planning phase sets the stage for the success of the development effort. If not done properly, the budget and schedule may not be sufficient, the problem may not be adequately defined, the final project may not solve the business problem, and the right people may not be involved.

In managing the IT project, it has to take consideration of user involvement. There should be a defined program and project management approach that is applied to IT projects, which enables stakeholder participation in and monitoring of project risk and progress. One of the project management frameworks is providing for participation by the affected user department (owner/sponsor) management in the definition and authorization of a development, implementation or modification project.

IT steering committee should be established and has role across the bureaucracy boundaries. It defines the policy on managing IT projects, such close involvement of user that affected and stakeholders in the project phases. A comprehensive organization and user needs can be defined without the interest of each top level management in the

DRAFT

organization. Hiring consultants could be used to bridge the lack of IT literate in the management. The steering committee will monitor the IT project from defining the user needs to implementation and prepare budget for maintenance.

One of the audit objectives of IT audit on IT project is to determine the effectiveness of IT project by ensure that outcome of the IT project conform to the business needs, user needs and organizational goals. Effectiveness in IT projects can be measured by linking with the achievement of organization's goals that supported by IT infrastructure and the satisfaction of everyone.

In the post implementation phase, user, customer and stakeholder as well, should asked about their perception of the system and application has been implemented and/or they use. The IT project considered effective if the organizational goals could be achieved using the system and application that support the business processes and they are satisfied about using and performance of the system and application.

References

1. IT GOVERNANCE INSTITUTE, COBIT 4.0, USA, 2005
2. GALLEGOS, FREDERICK, MANSON, P. DANIEL & ALLEN-SENFT, SANDRA, Information Technology Control and Audit, 1999.