

Role of Mobility Strategy in Moderating the Effect Of ERP Performance to Operational Performance

(Study in Indonesian Palm Oil Plantation Industries)

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Abstract— Indonesia has an important role in the world's palm oil industry. One way of efficiency in business processes of the company is to make the implementation of Enterprise Resource Planning (ERP), which aims to increase the productivity and effectiveness. Palm oil plantation companies implementing ERP hope that it will provide great benefits in operational performance, but the performance has not been measure yet that ERP has been performed. Organizational Trust and Transformational Leadership are needed to get the ERP performed in the organization. The Mobility Strategy surely can be the leap that can moderating the effect of ERP performance to the Operational Performance.

Keywords— *Operational Performance, ERP Performance, Mobility Strategy, Organizational Trust, Transformational Leadership, Oil Palm Plantation*

I. INTRODUCTION

Over a decade, the palm oil industry to be an industry that is in demand in Indonesia. In 2014, Indonesia produced 29.345 million tons of crude palm oil (CPO) of the entire area in Indonesia which reached 5.46724 million hectares with a total production of 28,021,289 tons, is estimated to increase by 5.47 percent in 2015 to 30.95 million tons [1]. Indonesia has an important role in the world's palm oil industry.

The rapid growth of the palm oil industry is a phenomenon that is increasing significantly every year where the palm oil business has been able to improve the welfare of the people in Indonesia. However, in the 2015 IMD World Competitiveness Center, as the originator of the country and the world ranking competition, placing Indonesia at number 42 of the 60 countries in the world competitive level, down from 37 in the order of the previous year [2]. At the current growth of the palm oil industry, in the world competitive ranking it shows the competitive level of the Indonesian state decreases.

CPO has become a global commodity, many oil palm plantation companies in Indonesia to transform into a world-class company to improve corporate performance and enable it to compete better globally. One way of efficiency in business

processes of the company is to make the implementation of Enterprise Resource Planning (ERP), which aims to increase the productivity and effectiveness. ERP is an information system that is implemented to perform the operational efficiency of the company [3], where the implementation is an important part of the way the company can make changes and increased performance [4].

Oil palm plantation company in Indonesia into the competition into a world-class company, for it takes a lot of changes in the organization. Leadership is the basic foundation for the management of human resources so that the organization can overcome resistance to change and evolve to a higher goal to earn victory points together [5].

Organizational trust is becoming increasingly important to the success of the company's strategy to remain competitive in a global economy that is constantly changing [6]. Organization trust are an important factor so ERP can run well. Research about organization trust is still rare, so it needs further study because it is one important factor in the process of ERP implementation [7].

II. RESEARCH

A. Problem Identification

Palm oil plantation companies implementing ERP hope that it will provide great benefits in operational performance, with cost efficiency by accelerating business processes are already integrated in the system information. In 2015, Gartner CIO Agenda Report puts ERP in rank 4th in the company's investment priorities; the value of investments increased from 26 percent in 2014 to 34 percent in 2015 [8]. ERP is still a top priority in the information technology investment in the company, so it certainly is not cheap these investments should be of great benefit to the company's growth.

ERP predicted to require a better solution framework to support the effectiveness of its implementation [9]. ERP implementation has many critical success factors that will determine whether its implementation will improve

organizational performance and create competitive advantages, one of which is the support of the top management have a crucial role in the implementation process [10], [11]. Possible failure of ERP implementation has also increased. Panorama Consulting (2015) issued in 2015 ERP Report to examine the ERP software selection, implementation, and satisfaction trends across industry, organization size, and geographic location. The results showed that the majority of organizations extending the duration of implementation and has a bloated budget. ERP implementation failure is increased by 5 per cent, in 2015 amounted to 58 percent of ERP implementation success, 21 percent failure, and 21 percent neutral [9].

ERP serves only as a support on the core business rather than to provide a competitive advantage [12]. ERP should not just stop at the implementation stage, but continues on ERP performance which the company is able to run ERP resulting benefits to the company in accordance with the objectives of the company.

Based on the background of palm oil companies in Indonesia that have implemented ERP, the study found several problems, as follows:

- The new ERP at the implementation stage, not yet reached the stage performance.
- Factors which could hinder the performance of ERP, especially Organizational Trust and Transformational Leadership requires further research.
- ERP only produce tactical benefits, not strategic.

B. Research Purpose

This research purpose is to identify the condition of the Organizational Trust, Transformational Leadership, ERP Performance, Mobility Strategy, and Operational Performance in oil palm plantation companies in Indonesia, as it will also identify the role of the Organizational Trust, Transformational Leadership, and Performance in influencing ERP Performance moderated by Mobility Strategy in oil palm plantation companies in Indonesia.

C. Research Benefit

This research will be able to contribute to the theoretical aspects to enrich the theory that the Organizational Trust and Transformational Leadership effecting the ERP Performance. It will also enrich the theory that the Mobility Strategy is the moderator in ERP Performance in influencing Operational Performance.

III. LITERATURE REVIEW

This research studies the literatures from many sources which are involving Organizational Trust, Transformational Leadership, and ERP Performance.

A. Operational Performance

The entire structure of the operational improvements built on the foundations of the culture and values [13]. As for the

operational development consists of manufacturing, engineering, supply chain, services, and planning strategy, all of which will improve system and process, further strategic directions and goals will be improved, and can give an increase also in the gaps and challenges improvement plan, vision so that operations can be achieved, thus achieved operational excellence [13]. Systems and processes are part of steps to achieve operational excellence, so that the implementation of systems and processes and can provide benefits to the company an important part in operational excellence.

B. Mobility Strategy

Suitability of business processes becomes a high priority today in the digital age, some important elements are: (1) changes radically, (2) changes in orientation, (3) The redesign of business processes, (4) Changes in organizational structure, (5) Improved technology, (6) Improved customer service and reduced costs [14].

The redesign of business processes will radically increase integration in business processes and create output value to customers [3].

Mobility strategy is one of the organization's efforts in transforming the business. The organization's ability to execute mobility strategies become increasingly important factor in the everyday environment of business companies [15], almost the entire industry can accept that enterprise mobility is the next stage of the digital revolution and has emerged as a topic of great interest to the professionals and academics [16].

C. ERP Performance

Enterprise Resource Planning (ERP) is a dream come true, is a software package promises integration of all information flows through the company, consisting of financial and accounting information, human resource information, supply chain information, customer information, a new class of software applications was introduced to operations in the last decade that consolidated all activities of the company's business operations in a single system [13].

ERP performance can be evaluated from the magnitude of the social shaping of technology that occurs due to the implementation of ERP [17]. Many studies have been conducted to determine the critical success factors of ERP implementation. Though the problems that often occur is after the ERP implementation process is completed, not automatically be said that ERP is already able to run by an organization or a company with a good, or ERP already provide benefits to improve operational performance.

D. Transformational Leadership

Leadership is the foundation for the management of human resources for organizations to overcome resistance to change and evolve when reaching a higher goal to find a win-win [5]. Bass (2005) writes that conceptually, is a charismatic leadership and followers strive to identify leaders and imitate him.

Leadership inspires followers with challenges and persuasion, to give meaning and understanding; intellectually stimulating, and followers will increase the use of their abilities; attention to the individual, providing support, advice and guidance to followers [18]. Leadership is part of organizational behavior in a group structure that would be related to the conflict, power, and influence organizational culture [19]. Leadership is an important part in the organization, so it is necessary for the proper type of leadership can make the required changes in the organization.

E. Organizational Trust

Trust is required for people to live together, cooperate, and coordinate efforts and behavior, and it appears in the necessary conditions: mutual dependence, risk, and free choice [20]. Relations of cooperation depends on the level of trust between colleagues [21]. Confidence in the organization is the thorough conviction that an organization in communication and behavior competent, open and honest, caring, reliable, and worthy of identification with the goals, norms, and values [22].

In the performance of a system such as ERP, organizational trust is crucial because ERP is considered to have worked well if it is able to make an impact for the company, where the impact would be felt by many people. Start of the implementation process, ERP always involves a lot of people in a team both internal employees of companies that act as key-user and the user, consultant or vendor as aiding. Also related to the security of the system, confidence in the system, vendors, and consultants is important for users to ensure the security breaches and problems with system downtime does occur during execution [7].

Good ERP performance will consistently deliver the changes that must be implemented within the framework of business process efficiency where a lot of people who have to adjust to it. So this means that many people should be able to have confidence in the performance of ERP as a system that can provide benefits to the company. Organizational trust can even promote the stability and quality of social networks, by strengthening the norms that support cooperation and catalyze the entry of new members to the existing social networks. Organizational trust is able to penetrate the various possibilities of social relationships [23].

IV. THEORITICAL FRAMEWORK

The palm oil industry is an industry that is in demand in Indonesia and around the world. The numbers of companies continue to increase and also the needs of palm oil products. But on the other hand the level of competitiveness of Indonesia continued to decline from year to year. Oil palm plantation companies know that they need to improve their performance and be a world-class company, and therefore to apply information technology like ERP as one of the choices made by them. ERP implementation is not as easy as buying a product, it takes more effort to make it happen. ERP implementation failure rate increased from year to year illustrate the ERP may not work well enough in order to improve the operational performance of the company.

Palm oil industry is a labor-intensive industry in which to run the industry requires a lot of manpower, also a very wide business area to be managed. With a business like this, it takes ERP to be able to see the course of the overall business, monitoring the process and the work is running, and can quickly make decisions for the business. ERP Performance has become an urgent need for a palm oil plantation company, because it is evidence of the ability of companies to use the ERP as an enabler to improve the operational performance of the company. Otherwise, ERP only become a technology purchased by the company but does not provide the right benefits for the company, and it is a wasted investment.

In order to increase effect of ERP performance to the operational performance, the company might implemented a mobility strategy within the organization, which is expected to be a moderator of providing added value to the connectivity accompanied by security, as well as intimacy with ERP users. The importance of the mobility strategy will give the company more efficient business processes, higher integration, appropriate technology, strong cross-functional coordination, precise time, and can achieve more goals. Mobility strategy can give effect to the ERP performance in order to improve the operational performance of the company.

ERP performance in its application requires organizational trust required for people to live together, cooperate, and coordinate efforts and behavior, and it appears in the necessary conditions: mutual dependence, risk, and free choice [20]. Organizational trust will bring the performance of ERP is more profitable for the company because it can improve the stability and quality of the ERP itself.

In this study, the role of leadership becomes an important variable needed by the company in order to accelerate the performance of ERP. Transformational leadership will provide an ideal effect, provide inspirational motivation, intellectual stimulation and individualized consideration to the organization and will speed up the performance of ERP.

According to the framework above, it is developing the research model. The model of this research will be used as a guideline for recommendation of solving the problem in this study. Theoretical research framework that describes the effects of variables: Organizational Trust, Transformational Leadership, ERP Performance, Mobility Strategy, and Operational Performance.

A. Hypotheses

With literature review and theoretical framework, these study hypotheses are:

- H_0 : Organizational Trust and Leadership Transformational not effecting ERP Performance.
 H_1 : Organizational Trust and Transformational Leadership affecting the ERP Performance.
- H_0 : ERP performance not affecting Operational Performance.
 H_1 : Operational Performance effecting ERP Performance.

- H₀: Organizational Trust, Transformational Leadership, and ERP Performance not effecting Operational Performance.
H₁: Organizational Trust, Transformational Leadership, and Operational Performance effecting ERP Performance.
- H₀: Organizational Trust, Transformational Leadership, and ERP Performance not effecting the Operational Performance moderated by Mobility Strategy.
H₁: Organizational Trust, Transformational Leadership, and ERP Performance affecting the Operational Performance moderated by Mobility Strategy.

B. Variable Operation

In this study, there are 3 (three) endogenous variables, namely Organizational Trust, Transformational Leadership and Operational Performance, 1 (one) intervening variables that ERP performance, as well as one (1) moderating variable that Mobility Strategy, as seen in Fig.1 below:

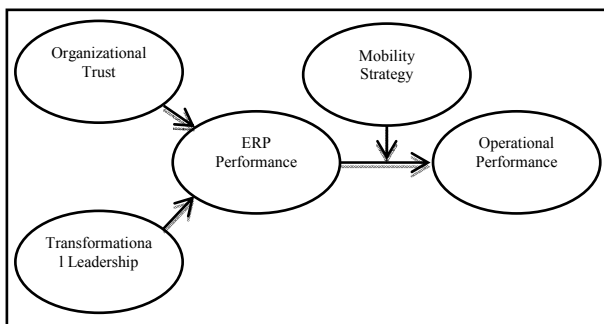


Fig. 1. Research Model

C. Data Gathering and Sampling

This study uses a sampling method that is non-probability sampling with purposive sampling. This is done because the sample size is not known from the beginning. Determination of the sampling techniques with particular consideration namely palm oil plantation companies that have implemented ERP, and the sample is contacted in accordance with certain criteria that are applied based on objective research. In accordance with the variables to be studied related to organizational trust, transformational leadership, ERP performance, mobility strategy, and operational performance, therefore this research is conducted to the employees of oil palm plantations in the head office or site that using ERP.

Sampling in this study is using five times the number of indicators as the minimum sample size in multivariate data analysis [24]. Therefore the sample size is minimum 200

respondents from specific Oil Palm Plantation companies in Indonesia that has been implementing ERP.

D. Analysis Structure and Hypotheses Testing

The structural equation model-partial least square (SEM-PLS) analysis is conducted to find out whether the hypotheses are accepted or not. The analysis is carried out through t-value processing test for the significance test of the model hypotheses. The results will verify whether there are positive correlation between organizational trust, transformational leadership, and ERP performance. The results also will tell does ERP performance affecting the operational performance. Within the analysis the research will show whether the operational performance effected by ERP performance.

Furthermore, the research will explain the role of mobility strategy in moderating the effect of ERP performance to operational performance.

V. THEORITICAL FRAMEWORK

Oil palm plantation industry needs mobility strategy to achieve a better operational performance. ERP performance can be more accelerate in terms of its usefulness, habits, transaction efficiency, flexibility, business insight, and collaboration by implementing mobility strategy that put connectivity, agility, and priority concerning the operational performance within the company. Handling large areas of business as the oil palm plantation industry facing, mobility strategy will put huge benefits to give companies more control of its resources and give more competitive advantages in gaining higher operational performance.

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