

Impact of Enterprise Resource Planning (ERP) on the Quality of Work of Company Employees: A Brief Review

Teddy Hikmat Fauzi^{1,*}, Latifah Adnani¹, and Maun Jamaludin¹

¹ Universitas Pasundan, Bandung, Indonesia

* Corresponding author: Teddy Hikmat Fauzi (teddyfauzi@unpas.ac.id)

Abstract

Enterprise resource planning (ERP) is a very complex and high-cost information system that places tremendous demands on a company's time and resources. Many ERP implementations have been classified as failures because the company did not achieve its stated goals. This article identifies the success factors, software selection steps, and implementation procedures important for successful implementation in manufacturing companies. Implementing Enterprise Resources Planning (ERP) in the company is part of the company's internal business strengthening strategy to increase strong competitiveness and manage the company professionally, efficiently, and effectively, as well as apply the principles of transparency, accountability, responsibility, independence, and fairness. ERP implementation in Indonesia has more impact tactical than strategic. The main objectives of our work are to review and analyze key articles on the impact of ERP projects on work quality and quantity. The results obtained are that the implementation of ERP has a positive effect on employee performance, and the implementation of the ERP system has a positive impact because the informants produce more work in one period.

Keywords

Enterprise resource planning, Literature review, quality of work, Company employee

1. Introduction

Companies today face the challenges of increasingly fierce competition, market expansion, and increasing customer expectations. It increases pressure on companies to lower total costs across the supply chain, shorten production time, drastically reduce inventory, expand product selection, provide more reliable delivery dates and better customer service, improve quality, and

coordinate demand, supply, and demand. and production (Shankarnarayanan, 2000; Katuu, 2020; Akyurt et al., 2020; Riswanto, 2021). As the business world moves ever closer to a fully collaborative model and competitors improve their capabilities, organizations must improve their business practices and procedures to stay competitive. Companies must also increasingly share important internal information they once aggressively protected with their suppliers, distributors, and customers (Loizos, 1998). And functions within the company must improve their ability to produce and communicate timely and accurate information. Companies increasingly turn to enterprise resource planning (ERP) systems to achieve this goal. ERP provides two main benefits that are not present in a non-integrated departmental system: (1) a unified enterprise view of the business that includes all functions and departments; and (2) an enterprise database where all business transactions are entered, recorded, processed, monitored, and reported. This unified view increases the need and breadth of interdepartmental cooperation and coordination. But enabling companies to achieve their goals improves communication and is responsive to all stakeholders (Dillon, 1999).

This ERP technology is the ideal solution for any fast-growing company and has many advantages that can help further improve company performance. However, the effectiveness of ERP applications varies from company to company. Mistakes made by some companies without realizing it will reduce the effectiveness of ERP, which can also cause losses for the company (Fauzi, 2022).

What the company experienced in this situation was a direct disruption to the company's operations, which interfered with the performance of company employees using ERP. ERP user performance affects the company's overall performance. Therefore, based on the purpose of implementing ERP, the performance of users who use ERP must increase productivity and quality along with the effectiveness of the company's ERP.

It is interesting to see how the impact of ERP implementation that the company has implemented on the performance of ERP users is seen from the user's side as workers in the company compared to before ERP implementation or before using ERP. For this reason, this research takes the title Analysis of the Impact of ERP Implementation on User Performance. From the theme or title, it is hoped that it can provide an overview of the factors of ERP effectiveness that support user performance so that in subsequent implementation, it can be a consideration for ERP developers and ERP users.

The impact implementing ERP should have a positive impact on user performance, in this case, workers in the company. Factors that are used to assess the performance of ERP users, in this case, include quality of work, the quantity of work, job knowledge, creativity, dependability, initiative, and Personal Quality. What is the impact of ERP implementation on ERP user performance, and what are the components of user performance that increase, remain, or decrease as a result of ERP implementation? The main objectives of our work are to review and analyze key articles on the impact of ERP projects on work quality and quantity.

2. Literature Review

ERP stands for 3-word elements: enterprise (company/organization), resource, and planning. These three words reflect a concept that leads to a verb, namely "planning", which means that ERP emphasizes the planning aspect and the description of ERP. It can be concluded that there

are similarities in ideas and main keywords in ERP, namely the existence of an integrated planning aspect in an organization or company to be able to plan and manage organizational resources and respond to customer needs well. The ERP concept can be run well if it is supported by a set of applications and computer infrastructure, software and hardware so that data and information management can be done easily and integrated (Simanjuntak & Setyawan, 2019; Laeeq, 2021).

ERP implementation is a type of project used to facilitate company management in making strategic company decisions by providing company internal data easily and quickly (Fauzi, 2021). ERP implementation requires a project team capable of changing the company's business processes or customization. The company's software and hardware customization process also incur relatively high costs, which can hinder ERP implementation (Rajagopal, 2002; Sharma & Sharma, 2017; DeNisi & Murphy, 2017; Cappelli & Conyon, 2018). The adjustment process between ERP products and the company needs must be known about the company's resource capabilities. The customization process requires key user competency dimensions: key user knowledge and expertise, individual key user characteristics, and key user performance in implementing ERP (Demonstrable Performance). The key user knowledge and expertise variables are the key user's understanding of the ERP project, the key user's ability to understand ERP, and the consultant's ability to help key users (Wei & Wang, 2004; Haddara, 2014; 2018).

The concept of performance appraisal can be divided into several interrelated dimensions, including: (1) Quantity of work, namely the amount of work completed in a predetermined period. (2) Quality of work, namely the quality of work by predetermined standards. (3) Job knowledge, namely knowledge about work and what things are their responsibilities. (4) Creativity creates creative solutions to problems arising in work. (5) Cooperation, namely the ability to cooperate with other people. (6) Dependability, namely awareness of the completion of work that must be done. (7) Initiative, namely awareness and willingness to expand responsibilities at work. (8) Personal qualities, namely the quality of a worker, include personality, leadership, attitude in daily life, and integrity (Roberts, 2003; Rasch, 2004; Rusu et al., 2016; Daniel, 2019).

A successful ERP project can reduce operating costs, produce more accurate demand forecasts, speed up production cycles, and greatly improve customer service, all of which can save companies millions of dollars in the long run. ERP also leads to inventory reductions because material management planners have more accurate data, such as how much inventory is already in the pipeline and can better predict future job demands (Stefanou, 1999; Fauzi, 2021).

Implementing an ERP requires key people throughout the organization to have a clear and convincing vision of how the company should operate to satisfy customers, empower employees, and facilitate suppliers over the next three to five years. There should be clear definitions of goals, expectations, and outcomes. Finally, organizations must carefully determine why an ERP system is being implemented and what critical business needs the system will address (Krupp, 1998; Stein et al., 2003).

3. Discussion

The quantity of work produced before and compared after ERP implementation of the three informants who provided information related to increasing the quantity of work related to ERP implementation as a whole stated that the output quantity of work they produced was more than

before using ERP. Several causes can be taken from the statements of the informants; among others, with the ERP, some informants can work more focused on work under the job descriptions of the informants so that they can produce or complete more work than before using ERP partially informants feel they are not focused on completing the work they should be doing because they receive work that is not the work of the informants, the second statement is that with the ERP some informants can manage and monitor the work they have completed more quickly and efficiently so that some informants can manage time to complete their work by predetermined targets. Before using ERP, it takes time to monitor and check the work the informants have completed (Lunenburg, 2012; Aggarwal & Thakur, 2013; Apak et al., 2016; Ali, 2021).

The results of the research by Wicaksono et al. (2015) stated that the quantity of work produced before implementation and compared after ERP implementation, from 25 informants who provided information about increasing the quantity of work related to ERP implementation as a whole stated that the quantity of work output they produced was more than before using ERP. Several causes can be taken from the informant's statement; among others, with the ERP, some informants can do work more focused on the job, according to the job description of the informant, so that they can produce or complete more work than before using ERP, before using ERP some informants feel unfocused in the work they should have done because they received work that was not the work of the informant, the second statement was that with the ERP some informants were able to cope and complete the work they completed more quickly and efficiently, most of the informants were able to complete the time to complete the work according to the set target has been determined. Before using ERP, it takes time to put together and check the work completed by the informants (Andrianto, 2019).

For the quality of work component (by predetermined standards), all informants, namely three informants who provided data and information, stated that the positive impact of implementing the ERP system was that all work carried out and carried out by informants became standardized because, at this stage, the implementation of all business processes that are still manual is made into a computerized system in the form of an ERP system. The quality standard referred to in this case is the standard of work results and the standard of time for completion of work. Before the implementation of the ERP system, although work standards had been set in the company's operational standards, adjustments often occurred in carrying out due to changes in conditions in the field, so it was not clear how far the existing standards could be changed to suit the conditions in the field. With an ERP system, all changes from the standard can be determined by the tolerance level of these changes (Andrianto, 2019).

Based on the discussion above, it can be analyzed in general that the implementation of ERP has a positive effect on employee performance. For the quantity of work (amount of work completed in a certain period), ERP system implementation has a positive effect because the informant produces more work in one period. And can monitor the work that has been and has not been completed by using the ERP system more quickly.

Then the quality of work component (quality of work by predetermined standards), ERP implementation has a positive impact because the work of informants has clear standards using the ERP system, so that related to work standards have clear standards (Bailey et al., 2015; Andrianto, 2019). For the Job knowledge component (knowledge about work and what things are responsibilities), ERP implementation has a positive effect because job information, standard

time of completion, and procedures for completing work are all information entered into the ERP system (Jones et al., 2006; Tsai et al., 2012).

4. Conclusion

Based on the evaluation results related to the impact of ERP system implementation on user performance of the ERP system, it can be concluded that, in general, the ERP system has a positive impact on user performance. Based on data and information, ERP implementation has a positive impact on the performance components of the quantity of work (completed in a certain period), quality of work (by predetermined standards), job knowledge (and other matters what are his responsibilities), creativeness (to create solutions to problems that arise in work), dependability (awareness of a job completion that must be done), personal qualities (the qualities of a worker which includes personality, leadership, attitude in daily life and integrity). The components above are positively affected by the use of the ERP system in the company.

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