Implications on the total business approach to the press red brick supply chain

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Abstract. Many strategies can be done by the company when it has an impact/implication, including the main actors in the red brick supply chain network press consisting of five business actors namely suppliers, manufacturers, distributors, retailers, and consumers. Continuous performance measurement is the key to all types of business success, so the purpose of this paper is to review the impact of the entire supply chain on the total effort undertaken, where performance measurement systems in the context of supply chains generate potential avenues for future research especially for new business people to be able to see what things need to be considered when starting a red brick press business. The author has found and classified the supply chain performance measurement system as one method of approach and systematic decision-making techniques. This study reveals that the SCOR Model approach as an indicator of red brick supply chain performance measurement and Analyst Hierarchy Process (AHP) as a decision-making tool can make a real indicator in the implementation of the current red brick business along with the impact on the market so that it is expected to get a solution to declare the effect of the red brick supply chain.

1. Introduction
There are many strategies that can be done by a company that will have an impact / implication, which in general there is no known reason or obstacle in improving a performance that will relate to the total sustainability of a company's business [1], namely business principal, or network members in the chain in the red brick supply chain where the supply chain consists of five links or principal actors, suppliers, manufacturers, distributors, retailers, and consumers. The five main actors must be as a totality, then the Implications for this Process will experience a change that requires phasing so that it needs to be detailed, distinguished, and planned about what, who, and how for each element such as mobilizer, focus, benefit, tool, action area, the guideline, model, alliance, and training, which will enable it to improve performance between the links. The key to this supply chain arrangement is the integration or managerial of the network between all relevant business owners [2]. This study looks at the most dominant potential of supply chain runs the relationship between the integration of supply chain processes and organizational performance [3]. The conflicting results regarding the relationship between the combination of supply chain processes and organizational performance in previous studies indicate that there is a need to investigate the possibility of the supply chain capability of a company that has a dominant effect on the relationship between two factors namely integration and managerial [4]. In a market environment that is currently unstable, the company faces significant challenges to meet customer needs. Also, competition has shifted from each company to the entire supply chain of a
company in this context, supply chain management (SCM) plays an essential role in keeping companies in the global market by effectively managing activities from suppliers to consumers. In this supply chain strategy, it is very concerned about and managing the business from the procurement of raw materials, manufacturing to consumers, so each supply chain wants to improve their performance to achieve customer expectations [5]. This study explains several relevant reviews about the impacts that need to be considered by business actors, especially for new entrepreneurs who will start their business in the red brick press business, the thing to note is the impact that will arise especially based on the results obtained from the SCOR indicator model and what has been decided by using the AHP model can provide an overview of the formation of things that need to be considered when going to start a business Red Press, so that the business process does not experience setbacks or go bankrupt, because it cannot withstand the pressure from the business. It is also expected that in the era of Industry 4.0 this can compete especially those related to humans [6], such as the labor market, building a research framework using the main contributions highlighted in the study. Many parties have examined and presented ways to solve the problems that exist in the case of supply chain management, along with potential implications in supporting the sustainability of a company, especially in the case of SCM [7].

2. Methodology
The method used in this study is using the SCOR model indicator as a reference, then using AHP as a decision-making step. Then this research framework is used to identify the similar supply chain structure of the company and has been formed by itself, then the performance measurement method in the supply chain will be examined, namely in the red brick company, and then the formulation strategy is designed to determine what factors will become a significant factor in the business process of red brick business as was done by previous researchers [8,9], so that the results obtained were needed in an effort to increase the red brick production business. Then the frame of mind in this study, the authors expect solution solutions from the impacts to be generated as can be seen in figure 1:

![Research framework](image1)

**Figure 1.** Research framework.
Based on Figure 1, the SCOR model (Supply Chain Operations Reference) is used to issue performance measurement standards that have become the basis for measuring a supply chain performance, both in terms of the organization and business processes, so that it can be used for comparison with other industries, which are expected to get a solution to declare the impact of the red brick supply chain, using the Analytical Hierarchy Process (AHP) approach as decision making [10,11]. Among the selection criteria that are seen in terms of total effort, the SCOR Model has six core processes, namely, Plan, Make, Source, Deliver, Return and Enable, which enable it to be used as an indicator of performance measurement or business processes. With these six core processes, both simple and complex can be explained and measured accurately, here are the core process indicators in the specified supply chain measurements from figure 2:

![Core supply chain process in SCOR 11.0](image)

**Figure 2.** The core supply chain process in SCOR 11.0 [11].

Based on Figure 2. It can be explained that SCOR This model has proven to be successful in describing and providing a basis for improving supply chain both globally and individually. These six core SCOR processes cover all customer interactions from the entry of orders to the payment of bills, all product transactions (materials and services) including equipment, parts, software, products in large quantities, etc.), all market interactions starting from aggregate demand through fulfillment orders can be overcome [12]. The AHP methodology used to improve the weighting required in the SCOR model in decision-making processes [13], also includes the following five components, among others; Package, Source, Delivery, Making and return process. Empirical studies have been studied by six companies [5]. This study proposes a supply chain performance prediction system based on multilayer perceptron neural networks and SCOR model metrics. In a previous study, the random sampling cross-validation method was applied to select the most appropriate topology for each of the seven models that compiled a system on the SCOR model [10].

3. Results and discussion

Based on the problem of performance appraisal, the level of performance parameters can be calculated by combining the AHP weight calculation with the performance of the matrix. Following is the relationship matrix between combining the SCOR indicator model, which will take into account what will be the impact on the total effort in the red brick supply chain:
After determining the indicators with the SCOR Model, the next step is weighing the level of importance at each level using AHP. The results of the recapitulation of SCM performance with total business considerations can be known [14]. Production at the level of performance attributes as presented in Table 1.

Table 1. Performance weight.

| Performance attributes | Performance value | Weight value | Performance indicators | Weighted performance |
|------------------------|-------------------|--------------|------------------------|----------------------|
| Reliability            | 94%               | 0.7060       | Excellent              | 0.60                 |
| Responsiveness         | 70%               | 0.2061       | average                | 0.14                 |
| Cost                   | 71%               | 0.6479       | good                   | 0.50                 |
| Asset                  | 60%               | 0.2940       | average                | 0.18                 |

Based on table 1, it can be explained that the performance attributes of responsiveness and assets have average performance, while Responsiveness and Assets have ethical performance values [15]. Reliability performance attributes that are influenced by delivery performance [14], and order fulfillment has excellent performance values, with SCM performance values of 94%.

4. Conclusion

After measuring and analyzing the calculation of SCM performance and weighting with the Analytical Hierarchy Process (AHP). Shows that the most significant weight for pairwise comparisons between processes is Reliability which shows that the highest performance value is in the Reliability process so that the conditions in increasing the total effort are Reliability of a Red business brick is very necessary to be developed. The SCOR model provides similarities to the supply chain framework, standard terminology, general metrics with related benchmarks [16,17], and best practices. This can be used as a general model for evaluating, positioning, and implementing the supply chain, and best practices. This can be used as a general model for assessing, placing, and implementing the supply chain. It is argued
that the SCOR model must consider management changes and discuss issues related to the use of SCOR’s performance metrics for decision making. This is intended to improve the SCOR model and finally become a standard rule or indicator as a reference in the process of decision making [18].

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