



Designing Debt Payment Standard Operating Procedures in the SMEs Retail Industry Using Business Process Modeling and Notation (BPMN): A Case Study of a Retailer in East Java, Indonesia

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Abstract: The application of standard operating procedures on the micro, small, and medium enterprise retail industry was critical since this type of enterprise employs the majority of national workforces and has become the most significant sector in Indonesia's economic growth. The purpose of this study was to investigate the business process and develop standard operating procedures for the debt payment process at one of the representative retailers in East Java Province, Indonesia, PO Dolopo Grosir. This study was part of a descriptive and qualitative study. Interviews and observations were also used to obtain data. According to the research, the development of a business process diagram would be the standard operating procedure during the debt payment process. Business Process Modeling develops this SOP creation activity further by adding several related artifacts such as data and business rules. The business process model modeled with BPMN can be used by parties who understand technical matters to be translated into information system needs.

Keywords: SME, Standard Operating Procedure, Business Process Modeling Notation, Expenditure Cycle, Debt Payment

INTRODUCTION

To operate commercial activities and attain goals, any institution or organization unquestionably requires human resources or employees. Human resources are a source of energy, power, movement, activity, and action (Wirawan, 2009). A good human resource performance is critical to realizing a high-performing organization or institution, as well as supporting the implementation of a set of programs determined by the organization, because human resource performance is an accumulation of three element interrelationships such as effort, skill, and the

nature of the external situation (Syukur, 2012). To achieve the goals, an organization must have a high quality performance. The high quality is an essential basic need for the organization. The quality is not only based on product and service offered, but it is also related to how the employees do their job and work process performed to result product and service (Manghani, 2011). One of attempts to improve organizational performance is the implementation of standard operating procedure (SOP). SOP is an organizational instrument to achieve the goals (Ajasta & Addin, 2018).

The standard operating procedure is primarily a work guideline that ensures the organization's business activity is regulated methodically (Taufiq, 2019). The higher the quality standard, the more complicated the operational process, and the more stringent the business rivalry, the more each company will need to punish its personnel in order for them to conduct in accordance with the organizational standard. The standard operating procedure (SOP) is believed to be capable of assisting the company in delivering signals relating to employee performance that management expects. Unfortunately, Indonesia recently has three employment issues, as the low understanding on work regulation (Liansyah, 2018). This situation is recognized by the number of employees who continue to violate the organization's work regulations, and they are used to working more according to previous habits for years until this habit becomes an organizational culture.

The standard operating procedure can create an adequate internal control system to prevent the problems. The standard operating procedure is a common instrument that used as work system control and guideline. Moreover, standard operating procedure is a written document which contains detailed, step-by-step, systematic, and organized work procedure (Widiastuti, 2013). The advantage of SOP for an organization is regarded as a basic control of operational procedure implementation in the organization. The good implementation of SOP will produce a smooth organizational operational activity, customer satisfaction, and maintain organizational quality and image, so the organization can survive in a more competitive business world, especially micro, small and medium enterprise in goods sale (Tambunan, 2011).

According to Central Bureau of Statistics in 2016, retail industry includes the category of small and medium enterprises which has contribution on total of PDB about 15,24% and engage employment about 31,81% from non-agricultural employment. The Ministry of Trade Agus Suparmanto has valued that the retail industry plays an important role to support the national economic growth in terms of trade and consumption (Source: republika.co.id, May 5, 2017). The prospect of retail business recently reflects a positive trend due to the indicators of consumption growth of Fast Moving Consumer Goods (FMCG). The ministry of trade has also stated that the growth of FMCG consumption in modern retail sector is approximately 7,6% with 12% minimarket format, 5,8% negative growth of supermarket and hypermarket. Further, the ministry of trade has confirmed that this decrease may refer to the change of consumption style, people nowadays like shopping at smaller shop, because the shop location is closer (source: antaranews.com, November 12, 2019).

Essentially, all micro, small, and medium-sized businesses have the same capacity to advance to the next level. Some issues may arise throughout the process of small and medium company growth, such as organizational management, human resource management, financial management, and so on. In the process of building a systematic business, it requires a good business management from all aspects, particularly through the implementation of SOP that is hopefully able to regulate the smoothness of business operational activity. Fundamentally, SOP is a guideline used to make sure that all decisions and measures are practiced efficiently,

effectively, consistently, systematically, and based on the standard. The small and medium enterprise is really significant for economic development in a country, thus, the implementation of SOP is a general method that must be completed to maintain administration quality in the majority of micro, small and medium enterprises (Hamrell & Wagman, 2001).

The purposes of SOP implementation on micro, small and medium enterprise are to maintain the business quality and make sure that the work output remains the same although it is done by different people. For the micro, small and medium enterprise businessman, SOP can also be a base to define the role and responsibility of each employee position and prevent from doubt and error. The implementation of standard operating procedure (SOP) is also exerted as a base to conduct a regular improvement. This technique is also used by retail micro, small, and medium companies, such as PO Dolopo Grosir in East Java's Madiun District, Indonesia.

PO Dolopo Grosir is a private entity that operates as a small and medium firm in the retail sector. PO Dolopo Grosir is located in Krajan Village, Bangunsari Sub-district, Madiun District. This store provides a wide range of basic necessities and is one of the largest wholesale outlets in the surrounding area. PO Dolopo Grosir is a medium retail company that must compete with other medium retail companies. As a result, PO Dolopo Grosir must be constant in ensuring performance quality. However, there are many similarly micro, small, and medium companies, such as PO Dolopo Grosir, which do not have a defined operational procedure in place.

The entity or organization which does have SOP as PO Dolopo Grosir is generally depended on key persons; they are senior people who have known everything about organizational operational background and details. The organization which does not have SOP will be overwhelmed when these key persons are gone. Commonly, the function of SOP is not only an operational control instrument, but also an instrument to maintain the quality and consistency of organizational output. SOP must be the organizational flow and not as barrier for the organization or management system. Hence, the design of organizational SOP is not arranged randomly, because it must be considered according to the flexibility level of organization.

This applied research, the researcher will exert BPMN tool to analyze business process on the research object and attempt some improvements if needed. The Business Process Model and Notation (BPMN) is a standard of business process modeling which provides graphical notation that is aimed to determine business process in a business process diagram. The purpose of BPMN is to support the business process management, either for technical user or business user, by arranging intuitive notation for business users, but it can act a complex process (Wagiu, 2018). The benefit of using BPMN is that it can represent the whole flow of a business process in a simple diagram, allowing it to provide a relatively clear business process, model message flow, and model process flow sequentially from the beginning to the end (Sari & Asniar, 2015).

The BPMN output will be used as a reference to plan the SOP. Business Process Modeling (BPM) expands on the SOP planning process by including data and business rule artifacts. Through business process modeling, it can be analyzed a process to get an optimum process effectively and efficiently.

LITERATURE REVIEW

Micro Small Medium Enterprises (MSMEs)

The definition of micro, small, and medium enterprise varies depending on the organization or even the legislation. Based on UU number 20 of 2008 concerning Micro, Small, Medium Enterprises (MSMEs), MSMEs can be defined as follows:

1. Micro-enterprises are productive businesses owned by individuals and/or individual business entities that meet the criteria for Micro-enterprises as regulated in this regulation.
2. Small Business is a productive economic business that stands alone, which is carried out by a business entity or individual that is not a branch of a company or a subsidiary that is controlled, owned or become a part either directly or indirectly of a Medium or Large Business that meets the criteria of a Small Business. as referred to in this regulation.
3. Medium Enterprises are productive economic businesses that stand alone, which are carried out by business entities or individuals who are not branches of companies or subsidiaries that are controlled, owned, or become a part either directly or indirectly with Large Businesses or Small Businesses with a total net worth or proceeds. annual sales as regulated in this regulation.

Four criteria can describe the strategic position of Indonesian micro, small, and medium companies (Sarfiyah, et al., 2019). First, the micro, small, and medium enterprises do not need a lot of capital as the big companies do, therefore, the formation of this business is not as difficult as big companies. Second, the required workforce does not necessitate a specific level of formal education. Third, the bulk of micro, small, and medium firms are located in villages and do not require as much infrastructure as large corporations. Fourth, micro, small, and medium companies have demonstrated persistence in times of economic crisis in Indonesia, such as in 1997 and 2008. After learning from the economic crisis, micro, small, and medium-sized businesses are projected to be able to enhance the investment climate and raise business enthusiasm, allowing them to be a pillar of national economic development.

Standard Operating Procedure

Standard Operating Procedure (SOP) is a detailed job instruction which has goals to realize homogeneity at work or other functions (Barbosa, et al., 2011). The standard operating procedure is a formal document which is consisted explanation on how the individual or organization can perform and document their work (Gough & Hamrell, 2009). The standard operating procedure contains work instruction, step-by-step from the detailed process and instruction, so the implementation of business activity can run consistently (Moreno, et al., 2015). On each management system with a good quality is always based on standard operating procedure (Fatimah, 2015). According to Atmoko (2011), SOP is a reference or guideline of proper execution of work tasks according to the function and performance assessment tool on governmental institution. The implementation is based on technical, procedural, and administrative indicators according to work procedure, work system, and work procedure on related work unit. Moreover, the well-planned and documented standard operating procedure can contain a clear direction and instruction which is aimed to prevent deviation (Hollman, et al., 2020).

According to Jain (2008), SOP is a life documentation that must be followed in all designated actions. The standard operating procedure can inform users about what happens throughout a business process in all operational zones (Frank, 2010). A good SOP must include important information such as work specification detail, job order, and many others, so that employees who are engaged or have not been involved may take the necessary actions to achieve the goal (Jinkyun, 2009).

Business Process Modeling Notation (BPMN)

The purpose of business process modeling is to evaluate and improve business processes in the future. Business processes are typically analyzed by grouping the processes and sub-processes that occur in them to the activity level. The activities that are interrelated between one party and another are described in the business process analysis (Yunitarini, 2016).

BPMN is a graphical notation which can be used to describe steps in the business process. BPMN depicts the business process flow from the beginning until the end. A set of notations in BPMN is designed to coordinate a set or process of integrated activities (Perdanakusuma, et al., 2020). BPMN is also functioned to identify potential of problems in the business process. BPMN is a technique of instrument to enable the business process executors building a proper, clear, and efficient communication (Hamidin & Maniah, 2017).

BPMN is a standard for describing business processes issued by the Open Management Group (omg.org). The latest version of BPMN is BPMN 2.0.1 which was released in September 2013. There are no significant differences between this version and the previous one, which was released in January 2011. Many large organizations have implemented BPMN standards to realize business processes up to this point, and it appears that BPMN will become a standard international standard (Yudhanto, 2016).

The advantage of using BPMN compared to other business processes such as UML (Unified Modeling Language), Flowchart Techniques, DFD (Data Flow Diagrams) and others is that the standard syntax is well defined. This makes it easy for business analysts to collaborate with each other. BPMN is also supported by most of the modeling tools which make it easy to share and edit it. All of these advantages make BPMN the most popular business process modeling technique today (Asmoro, et al., 2020).

RESEARCH METHODS

This study used a qualitative research design, which was characterized as an investigation and in-depth understanding of the relevance of group and individual behavior. The qualitative research design was used to represent conditions as they were in reality, whereas the descriptive research design was used to explain or evaluate a study result but not to make broader conclusions (Cresswell, 2009). The primary data utilized were obtained directly such as through field observation and interviews. The direct observation was an observation through the five senses as to what the observer felt and saw, whereas the interview was a meeting activity between two or more person for information exchange using the question and answer technique, so the significance of a specific topic could be constructed (Sugiyono, 2017).

FINDINGS AND DISCUSSION

The identification of business process was carried out first on system of debt payment of particular object, PO Dolopo Grosir which was done through BPMN. This strategy was aimed to analyze which part that must be evaluated, so the suggestion for business process improvement could be achieved. The output result of business process design from BPMN is later standardized into SOP.

Every supplier has different payment terms depending on agreement. Some suppliers who did not accept debt payment, when the goods were arrived in the shop, the goods must be paid at the same time, but some of them accepted payment term or debt. The debt agreement on each supplier is also different due to the variety of products sold at PO Dolopo Grosir, so many suppliers were attached. Some suppliers have payment terms in a week, two weeks, and some

have a month term, depending on product restock schedule. Also, some of suppliers accepted payment delay and some did not.

One of factors that could generate debt payment delay was a lot of remaining and unsold stock items. There were certain conditions which the sales was not fitted to the sales prediction. A lot of remaining and unsold stocks caused the shop to avoid restock in restock schedule, and the payment would be completed in the next restock schedule. This payment delay can occur due to the supplier attachment to the shop party. PO Dolopo Grosir has interacted for years with many suppliers, thus, they have a quite good connection, and the payment delay due to the weak sales rate was regarded as an ordinary situation.

If the remaining stock items was half from the total purchase during restock schedule, so the payment and restock would be delayed, but in this context, the shop would offer payment as a form of shop commitment to pay off the bill. This delay was aimed to maintain the money shop flow, because the head of shop considered that the remaining stocks during restock schedule could obstruct shop money flow, which it could potentially interrupt payment of other product restock that were already sold and needed to restock.

The money flow at PO Dolopo Grosir was regarded quite high. The shop rarely saved money in the bank, because the shop location was in the village and almost all of sales transactions were cash-based. The shop turnover could drop drastically when rainy season, because only a few of customers would come to the shop during rainy season. When the turnover was down and the shop has payment schedule with a large amount of bill in the next day, in which the shop could not restock some items, so the items would be empty, therefore, the shop must delay payment, but still restock the empty stocks. The shop really avoided empty product stock, because it could disappoint the customers.

For the payment of delayed bill due to the lack of cash money, but the shop must restock particular stock items, the shop would keep restocking, but they requested to delay the bill and ask double note during the next payment period. For the payment of non-terminated bill, the payment would be completed a day after the order, exactly when the products have been already arrived at shop. When the financial admin pay the bill or debt, he must input into cash flow and update billing list. Based on the information from observation and interview results, the researcher arranged BPMN according to the actual condition of organization which would be standardized into SOP as below.

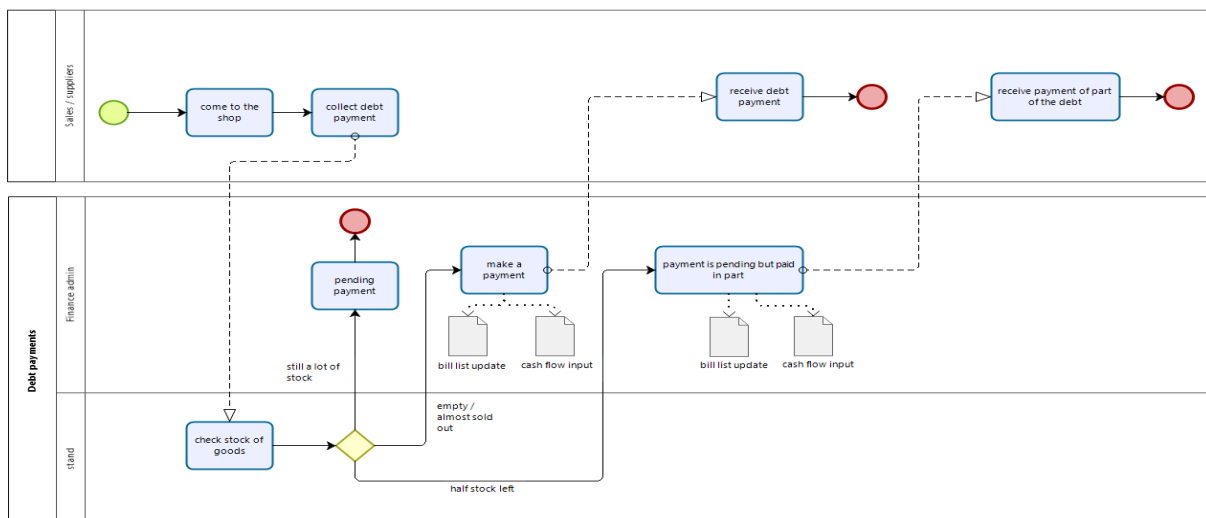


Figure 1. BPMN of Debt Payment Business Process

The details of BPMN were explained in the following points:

- 1) Sales or supplier comes to the shop
- 2) Sales or supplier collects debt payment
- 3) Sales heads to the stand section for product stock checking in the warehouse
- 4) If the stock is still a lot, the payment is delayed at the time agreed by both parties
- 5) If the stock runs out or is almost out:
 - 5.1 Financial Admin pays the debt
 - 5.2 Financial Admin updates billing list
 - 5.3 Financial Admin inputs payment into cash flow book
 - 5.4 Sales or supplier receives debt payment
- 6) If the stock remains a half:
 - 6.1 Financial Admin pays a half of bill
 - 6.2 Financial Admin updates billing list
 - 6.3 Financial Admin inputs payment into cash flow book
 - 6.4 Sales or supplier receives a half of debt payment

PO Dolopo Grosir has stand section which was functioned to keep product stock, serve customer, fill up the stocks that run out at the stand, and check the product stock at warehouse routinely according to the stand. The stand section has duty to accompany sales checking product stock remaining at warehouse during debt payment and restock schedule. While, the financial admin has duty to pay the bill or debt payment of products purchased, operational cost financing, employee salary payment, and receipt of sales proceeds.

To generate friendly users, SOP should be designed clearly, unambiguous, and written in simple language. SOP was a document which could be controlled by involved parties in a particular business process, function, or activity (GCP ICH Guideline, 1996). The good standard operating procedure is easy to be understood by involved people in a process, not only by the supervisor or assessor. The standard operating procedure must be written in a clear, appropriate, simple, but quite flexible to be useful for the shop (Cardiff University, 2009). Further, the standard operating procedure was the first line of business defense in a checking process, by supervisor, business partner, or candidates of business partner, and customer. SOP was a form of protection to ensure that every activity and business process occurs as they should. Therefore, having a good standard operating procedure would result a good obedience and help confirming a right business practice (DeSain C, 1991). The design of standard operating procedure above was expected to minimize error level and confusion in running a business process. Then, the planning of a good SOP in a business process would be able to produce accurate benchmark for the business executors (Marriot, et al., 2011).

CONCLUSION AND RECOMMENDATION

The standard operating procedure was an organizational tool to achieve goals. The standard operating procedure could be used as a control and guideline of work system. The good implementation of SOP would result a smooth organizational operational activities, customer satisfaction, and maintain a good quality and image of organization, so the organization could survive in the increasingly competitive business world, especially micro, small, and medium enterprise in retail field. The function of SOP was not only as an operational control, but also as a tool to maintain organizational quality and output consistency.

The aim of this research was to analyze the business process of debt payment at PO Dolopo Grosir by using BPMN as research instrument and plan standard operating procedure

based on business process diagram as the output of BPMN. This research result was design of standard operating procedure from the debt payment business process at PO Dolopo Grosir.

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