Study of the Method of Configuration, Storage and the Operations at the Batu Pahat Perodua Sales

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ABSTRACT
The configuration, the storage and the operations form the important aspects in the management of a laboratory and workshop. These three aspects play a vital role in the management of all activities and work schedules in the anticipation to simplify and move smoothly and optimized the work force and the time spent to resolve and produce an effective service output. To achieve all of these three aspects and form them as a regular activity to all staff in the aspects of the configuration of The Storage General Rules, the Equipments Concept, Retention of Merchandise Based on their Date of Expiry, Retention of Special Services Maintenance Tools (Sst), Stock Master Maintenance system, First in First out system (Fifo), the 5S Principles And Kaizen are being practiced whereas for the purpose of storage and handling, the principles and work steps such as Customer Request Order (CRO) and Dead Stock are used as a work activity guide.

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1.0 Introduction
The Otomobil Kedua Sendirian Berhad is in short the brand named Perodua. The shares in Perodua are held: thirty eight percent by UMW Corporation Sd. Bhd, twenty five percent by Toyota, twenty percent by MBM Resources Sdn Bhd, ten percent by PNB Equity Resources Corporation Sdn Bhd and seven percent by Mitsu and Co. Ltd (UMW, 2016).

Perodua bears no self expertise to produce the designs and the main components for example the engines and the delivery system. In general Perodua utilized the Daihatsu’s components designs. Daihatsu held twenty percent of Perodua shares since the launching of the latter, and increased its shares to twenty five percent in 2001 and subsequently increased to thirty five percent. Just because of the demand of the usage and the sales of Perodua cars are high in Malaysia, at least one Perodua service centre branch is made available in every district in all states in Malaysia, to fulfill and provide a good and quality servicing services to the Perodua customers in Malaysia (Asha’ari F, 2018).

Every Perodua service centre branch adopt similar methods, procedures and steps in running their businesses especially the configuration of equipment and the merchandise in storage and also the retention and the usage of equipments and merchandise in the management of the workshop (Asha’ari F, 2018).

The Batu Pahat Perodua branch service centre, due to its location, is frequently patronized by its customers and this site was selected for the study of the aspects mentioned above being practiced and identified.

2.0 Operations of the Laboratory and the Workshop
The Batu Pahat Perodua Sales which receives orders for cars maintenance works would definitely require a good working system or a competently operating workshop to ensure that the smooth work flow is able to meet each and every request for customer’s car maintenance service.

This matter is important to ensure that the maintenance service as offered by the Batu Pahat Perodua Sales achieve the quality standards as an authorise service centre and to be at par with other perodua authorized service centres.

Among the Batu Pahat Perodua Sales’ operation of the laboratory and workshop that appears systematic is the management and handling of the stock system for maintenance works on customers cars. Based on every order received and problems arising from the customer’s car who patronize the Perodua workshop, the maintenance advisers will list down all the maintenance parts required for each customer’s car to be entered into the Stock Master Maintenance System (SMM) and be relayed to the store keeper’s office of storage for maintenance parts. The worker in charge of the stocks in the said office shall scrutinize the above mentioned order list and place it in print to be handed over to the mechanic on duty. As soon as the list of maintenance parts is being printed, the SSM system, which holds the data on the quantity of the up to date stock, will automatically reduce the number in updating the stock balance. The usage of a system such as the SMM in the handling of stock is vital to upgrade the effectiveness of a task. The stock management system is an important tool to enhance productivity and accuracy and also cause time saving in stock management (Ravichandra, 2016).

Besides the management system and handling of the stock, the Batu Pahat Perodua Sales also emphasized on the method of the usage and the safe guarding of equipments for maintenance works especially the equipments categorized as special service tools (SST). This is so because the equipments used by the workers are recorded in respect of the time it is taken and returned. For the convenience of the process of taking and returning the equipments, a numbering system is used on a label for each tool. A list of tools and their numbered labels are made ready and affixed in the storage...
room as a reference for the worker to select the tool required and return it after use to its original location. A form has been supplied especially for the purpose of recording the time it was taken and returned to its original place of retention. This is to avoid any tool going amiss and also to ensure the place of retention is kept neat and well arranged constantly. Following that, a tool found to be faulty will be sent to the authorized tools inspection company for the purpose of inspection and ascertain whether the said tool is still useable or not. If the tool inspected is still useable, an indemnity certificate certifying its use for a warranty period of one year will be issued. The certificate will indicate that the tool can still be of use within the stipulated period. Besides though, the tool confirmed as faulty will be replaced in filling up a specified form and send it to the Perodua Head Quarters for onward process. Besides the handling of SST tools, the Batu Pahat Perodua Sales also emphasized on the handling of personal tools provided for every mechanic on duty. Every mechanic on duty will have a personal work space area and in every work space a tool box for personal tools will be provided. The safe keeping and handling of the tools are the responsibility of the mechanic himself. The workshop tools allocated to the mechanic is subject to inspection by the management within a stipulated period ( Asha’ari F, 2018).

Furthermore, the management and the operations of the orderly and systematic workshop could be observed from the mode of handling of the merchandise or the “Customer Request Order” (CRO) stock. The CRO are special items ordered by the customers for the purpose of replacing faulty parts to repair a damage. Just because these stock is classified as a special stock for a repair and not inclusive of the ordinary stock, the management of the stock must be systematic to minimize the risk of the CRO merchandise being categorised as dead stock. The CRO category of merchandise are placed in a special rack with several tiers. Every maintenance adviser is allocated a tier in the rack to store the CRO merchandise of their respective customers. Thus, every service adviser is responsible to every customer’s merchandise order that he handles. The handling of CRO items in this manner is vital and effective to ensure that every merchandise ordered by the customer is claimed and not moved to the dead stock category. The strategy to control and handle the stock is vital to reduce the risk of being excess and dead stock (Hu, et al, 2018).

The managing and the operations of the Batu Pahat Perodua Sales appears systematic as the faulty parts found in the damaged customer’s car but falls within its warranty period will be collected and placed in a special place with the purpose of sending it back to the Perodua Head Quarters. A duration of one month is taken to collect all the said items before being sent to the Perodua Head Quarters. Following it, the Perodua Head Quarters will re scrutinize the item concerned to identify the fault and subsequently make improvements on its quality ( Asha’ari, 2018).

3.0 Storage
Just to overcome the storage problems faced by halfway workshop companies, with a purpose of installing a workshop management system. In the midst of a good structure designed data base system, for the retention of all information required and provide efficient and accurate feed back to the customers, was introduced ( Orak, Yaman, & Guerrini, 2012). The retention is for the purpose to simplify the humane work process in the economic usage of storage space, configuration of materials according to procedures or arranged in such a way that it does not hinder the task of unloading is being executed and also the configuration in simplifying the production tasks.

3.1 Special Service Maintenance Tool (SST)
Creativity has often been studied as an individual process. Even so then it is also in the form of a collective and social process, especially in an organization where creativity forms an activity to enhance innovation. Furthermore, firms are affected by outside influence, because the creative process is increasingly supported by ICT (such as competition and crowd sourcing platform). The workshops will enable companies to venture into new borders or design areas, or to resolve specific issues that could be resolved collectively. In the frame work of this working paper, only collective creative workshop will be considered, with focus especially centred on the process to overcome this creative production process (Gabriel, et al, 2016). Their lack of modern data in managing the function and limit the storage parallel performance. J-TEXT Cloud Data Base (JCDB) is the pile of data contents using the distribution to prepare the amalgamation of storage experimental data and management services ( Zheng et al., 2018). Thus this SST system uses code numbers or numbered stickers to the said tools to differentiate the tools that are frequently used and the Special Tools for repairs to perpetuate the continuity of the product material repaired whereby the scheduled code or sticker numbers assists to identify the tool to seek and use and simplify the task of finding tools. A certificate is issued for each tool by the manufacturing company so that it is constantly monitored in its use to safeguard its quality. Furthermore, it generates an output of good products based on the markings and the warranty assurance constantly emphasized.

3.2 Stock Master Maintenance
Special focus on the observation of the past work flow, which adopted the following characteristics: (1) work flow implement model, (2) heterogeneous computerization environment, and (3) data access method. To associate with a property is a set characteristic that can be used to the Workflow Management System (WMS) classification (Ferreira da Silva et al., 2017). Thus the system was created to simplify human services in the know how of stocks usage, is being used. It gives a direct information either to increase or to reduce and replace the available stock to ensure the exact quantity be made available when required by the user/customer. Besides that, taking into account the savings in storage space, ordering cost, purchasing cost and the capital involved. More ever, it will provide more benefit among it the unavailability of stock can be avoided but meet the customer’s needs. The more economic use of the capital and cash control can be monitored systematically and orderly in focusing to a high grade production product so that the intention of the product be utilized within the stipulated period. Idle, expired in warranty, faulty and worn out stock can be minimized. The storage space can be optimized for various other uses.

3.3 Retention of Customer’s Service Order (CRO)
Other than the merchandise set ready by the HQ for each branch, the Batu Pahat Perodua Sales accepts order request from its customers. Every customer that patronize the Batu Pahat Perodua Sales can place orders for any part or accessory they wish to purchase, but not yet available at the said branch, can still place an order but the customer may have to wait for a fixed time period until the item is made
available at the applied branch. The customer shall be taken care of by the maintenance adviser to ensure that the item ordered will arrive at the said branch. After the item ordered is received at the said branch, the maintenance adviser shall phone the customer to collect the item.

Once the item is received at the branch which had placed the order of the said item, it shall be placed in the rack under the control of the maintenance adviser who had initially accepted the customer’s order. Once the item is not collected from the first day of receiving till the 15 th day , the item shall be placed in the green label storage area. Once the item stored exceed the 16 th till the 30 th day, the item shall be placed in the yellow label storage. Once the item ordered being kept in storage exceeds 30 days, the said item shall be placed in the red label storage . If the customer still fails to collect the item as ordered, the item shall be considered as a dead stock and as an expired item. For items kept in the tentative storage are items which will immediately be collected by the customers at the date and the time mutually agreed upon by the customer and the maintenance adviser ( ASh’a’ri F, 2018 ).

3.4 KAIZEN System

The system is divided into two parts i.e. the DOJO system and the 5 S system. This DOJO is implemented is for the purpose of an on going betterment performance. The Batu Pahat Perodua Sales constantly do their utmost for the customers who patronize their branch ( ASha’ari F, 2018 ). This system also ensures that the condition of the workshop and laboratory are in a clean, well laid and in a safe condition for workers’ use. One of the examples undertaken by the Batu Pahat Perodua Sales authority was to reduce the number of racks for items storage. This will save space in the workshop and laboratory mentioned. The 5 S system consists of Seiri ( to separate), Seiton ( to arrange ), Seiso ( to sweep ), Seiketsu ( to uniformise) and Shisuke ( to implement always). The 5 S adopted in the Batu Pahat Perodua Sales are in the similar principle and system from Japan.

4. Conclusion

The handling and the storage of stocks is an important requirement in the management of a workshop and laboratory. There are 4 steps found in the implementation of a good management i.e. planning and determine as to what is to be done to achieve the organizational objective, i.e. to set the motivational sources needs that is motivational to co workers to work together and control i.e. control the sources for each operation conducted ( M. Armstrong, 1999 ). Thus the strategic handling and storage of stocks assist the organization to achieve the work objective as determined. With the presence of the method of handling and the orderly storage of stock will make it possible to overcome the issue of excess stock known as dead stock. Besides that, it will enhance safety, deter accidents at the place of work and also expedite the duration of work flow, since the systematic storage of stocks will simplify for the workers to collect.

Perodua adopted the 5 S practice methods in the handling and the storage of stocks. The 5 S method is simple and easily executed to be adopted into practical practice (Merino, 2003). The 5 S methods is practiced accordingly in many different versions to suit to the company, the community or the nation’s culture (Gapp et al. & Kobayashi et al.2008).

Although several different terminologies are associated to the 5 S by quality experts, but they all bring down to the same meaning and objective i.e. to sustain and enhance the quality of the environment at the place of work ( Mohd Nizam et al. 2010). The 5 S practice possess a self meaning i.e. seiri, seiton, seiso, seiketsu, and shitsuke; each conveying the meaning; to separate, to arrange , to sweep , to uniformise and to always implement, adapted from Malaysian Productivity Corporation (MPC 2010).

Besides that other several methods are also practiced by the Batu Pahat Perodua Sales, among which are the KAIZEN, DOJO, and the 7 Storage Techniques in the handling and storage of stock management. With the practice such as this will be able to minimize the use of storage space, provide a smoother and expedites movements since the items in storage are kept in a systematic and orderly manner.

In overall, every worker need to further enhance his skill in the retention and handling of stock. Skill becomes an important factor to ensure that the storage and handling of stock are efficiently and orderly executed. Besides that, workers’ skill and expertise in the handling and management of stock will be able to develop a more orderly and efficient.

References

Firdaus bin Ashari, ( 2018, April 3 rd ) the Batu Pahat Perodua Sales configuration, handling and storage of stock [ interview]


