

Promotional Materials Management System for Improving Brand Awareness in Part Sales, Marketing and Logistic Division (H3) Of Pt. Daya Adicipta Motora

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Abstract: *PT. Daya Adicipta Motora is a leading Honda motorcycle and spare parts distributor in West Java, contributing to PT. Astra Honda Motor. This company consists of three divisions, H1 (Motorcycle sales), H2 (Maintenance), and H3 (Spareparts Sales). Nowadays, spare part business is growing rapidly, leading to tighter business competition. This condition demands good performance from the main dealer to all its network. One of the demands is the high sales target. In order to anticipate this condition, promotion media is heavily required as a medium to introduce the product to the customer. The current promotional materials are banners, flag chains, and educational posters provided by PT. Astra Honda Motor. However, the distribution of these materials still faces a problem. This problem arises from both the main dealer and the network. It emerges in the form of inequitable distribution. From the network's side, the problem emerges due to the lack of information regarding available promotional materials and manual distribution. Therefore, a web-based application is developed using the Unified Software Development Process (USDSP). It aims to solve the problem mentioned earlier, and it also possesses value-added due to its feature that can help to manage promotional materials. The case study in developing this application was conducted in Part Sales, Marketing, and Logistic Division (H3) of PT. Daya Adicipta Motora. Using this application, it is expected to be able to help Part Sales, Marketing, and Logistic Division (H3) of PT. Daya Adicipta Motora to manage the promotional materials.*

Keywords: *Promotional materials, Spareparts, Main Dealer, Unified Software Development Process (USDSP), PT. Daya Adicipta Motora*

I. INTRODUCTION

PT. Daya Adicipta Motora is the leading Honda motorcycle and Spare Part distributor in West Java. It consists of three divisions, namely H1 (Motorcycle sales), H2 (Maintenance), and H3 (Sparepart Sales) [1]. A total of 1700 H3's networks are spread in the entire West Java province. Nowadays, spare part business is growing rapidly, leading to tighter business competition. This condition demands good performance from the main dealer to all its network. One of the demands is the high sales target. In order to anticipate this condition, promotion media is heavily required as a medium to introduce the product to the customer.

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network. It emerges in the form of inequitable distribution. From the network's side, the problem emerges due to the lack of information regarding available Promotional materials and manual distribution.

The growth of the business sector drives the dealer or AHASS owners to compete to draw customers' attention and to obtain good reviews from the Main Dealer. Many breakthroughs are made by the owners to enhance their competitiveness. One of the attempts to obtain good reviews from the Main dealer is by meeting all requirements made by the Main Dealer. One of the requirements is related to the display of promotional materials. To provide a better service to the dealer's networks, the present research proposes a web-based system to facilitate demands on Promotional materials, where the dealer can directly make a request for promotional materials without physically visit the Main Dealer and to help PT. Daya Adicipta Motora.

II. LITERATURE REVIEW

Warehouse Management Information System

According to Irfan, Syarief, and Marhaeni (2016), Warehouse Management Information System refers to the management of integrated activities regarding temporary goods storing, receiving goods from suppliers, goods handling, issuing goods [2]. Warehouse emerges as a pivotal aspect of the supply chain that determines the success of a business [3].

Based on the definition above, it can be said that Warehouse management refers to an activity of transporting goods from one place to another. In short, the activities done in a warehouse is as follow:

1. Receiving goods
2. Recording the inflow and outflow of goods.
3. Storing goods
4. Issuing goods

Unified Modeling Language (UML)

UML is one of the aid tools that can be used in object-oriented programming language. Nowadays, UML begin to be the future standard for object-oriented software/system development industry. This occurs because UML is basically used by many leading software engineering companies such as IBM, Microsoft, and others [4].

Unified Software Development Process (USDP)

USDP is one of the object-oriented software development frameworks. USDP, renowned as Unified Process (UP) is developed by Graddy Booch, Ivar Jacobson, and James Raumbaugh [5].

USDP is based on UML as the aid tool used in programming language. Therefore, the USDP development model consists of:

1. Analysis - this aims to scrutinize the details
2. Design - this aims to define the static structure of application
3. Implementation - this aims to map each component into the computer based on the analysis and design result.
4. Testing - this aims to describe the testing scenario to validate and verify the application.

III. RESEARCH METHOD

The present study applied descriptive qualitative approach.

The analysis and design phases were done through the following manner:

1. Direct observation to find out the issues or data relevant to the required materials such as studying documents, organizational goals and structure, business process, and information technology policy.
2. Conducting Interviews with employees of PT. Daya Adicipta Motora
3. Identification and documentation of organizational structure, identification and defining the business function, and relates it with the business function of each division.
4. Creating functional design using Use Case Diagram.
5. Developing a web-based application using CodeIgniter framework based on the design.
6. The test was done to validate the developed application,
7. Application deployment was done so that it can be used by the concerning parties.

IV. RESULT AND DISCUSSION

4.1. CURRENT SYSTEM

The current Promotional materials are banners, pennant, and flag chain provided by PT. Astra Honda Motor. These materials are stored in three warehouses of PT. Daya Adicipta Motora located in Bandung, Karawang, and Cirebon. However, both the main dealer and the network face problems regarding the distribution. The main dealer still makes the goods recording, goods outflow, and receipt manually using ms. Excel, while the network needs to request material promotion verbally to the area supervisor. After receiving the request, the supervisor makes request form..

4.2. PROBLEM ANALYSIS

Based on the observation on the process business of the current system, we conducted a weakness analysis. The result is displayed in the following table.

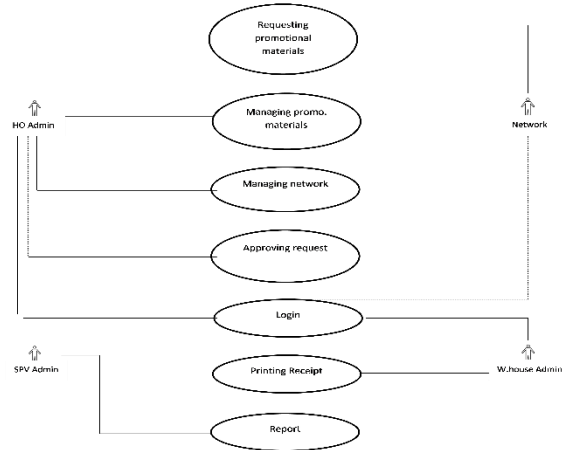


Table 1. Weaknesses of the Current System

No	Weaknesses of the Current System
1	The network still requested Promotional materials verbally.
2	The Area supervisor still make the request form manually.
3	The management of Promotional materials was still done manually using ms. excel
4	There was a huge stock difference because the cut was not done in a real-time manner.
5	The receipt was still made manually, sometimes it leads to delivery mistakes.

4.3. NEW SYSTEM

A breakthrough is made for improving brand awareness of Honda Genuine Part and reducing stock difference using a platform to facilitate the network in requesting Promotional materials and help the main dealer managing promotion material. This is done by developing an informative management system. To this end, it is necessary to build a website for distribution, Promotional materials distribution, and receipt-making automation. Regarding the new proposed system, the analysis process of the website is shown in Activity Diagram and Use Case Diagram.

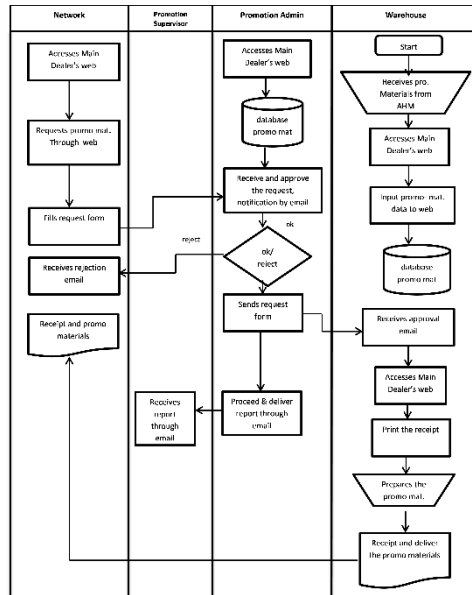


Figure 1 Activity Diagram

Figure 2 Use Case Diagram

As shown in figure 1 and 2, there are four actors, namely network, promotion SPV, Promotion Admin, and Warehouse. The network requests Promotional materials through Promotion Material Requesting System, the network will need to input the event name, date of the event, list of Promotional materials, and quantity requested. The area SPV and Promotion admin will receive notification of Promotional materials request via email. The promotion admin then checks the request in the Promotion Material Requesting system. If the request is approved, the Warehouse admin, the network, and the SPV will receive a notification via email. If the request is rejected, the network and the SPV will receive a notification via email. The warehouse admin prints out the receipt from the Promotion Material Requesting System and prepare the goods. Once it is prepared, the admin delivers it to the Expedition. The Expedition will deliver the Promotional materials to the address written in the receipt. Once the network receives the requested Promotional materials, it must sign and stamp the receipt. The Expedition then delivers the signed and stamped receipt to the Warehouse admin for the archive.

4.4. SYSTEM IMPLEMENTATION

To implement the analysis result, the present study used PHP and CodeIgniter as the framework. The result of implementation of the developed Promotion Material Management System is shown in figure 3, figure 4, figure 5, and figure 6. Within this system implementation, three main sides of the application are admin, network, and warehouse.

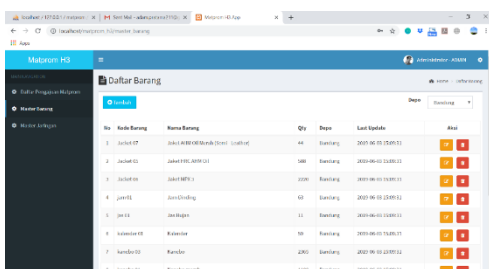


Figure 3 Goods Management menu for Admin

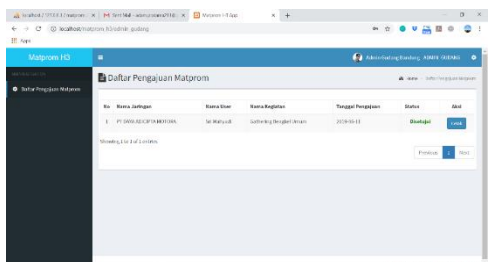


Figure 4 Promotional materials Request Menu for the Network

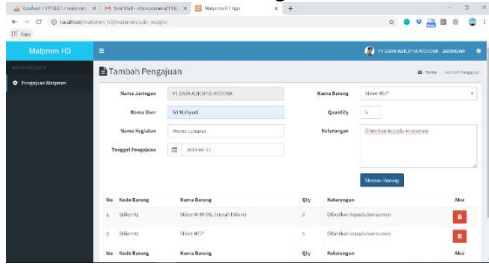


Figure 5 List of Approved Request menu for Warehouse

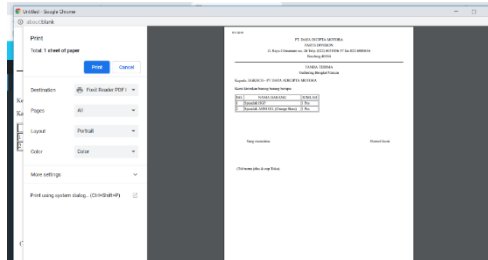


Figure 6 Automatic receipt-making.

3. CLOSING

V. CONCLUSION

Based on the discussion above, the following conclusions are drawn:

- a. Using Promotional materials Management System, H3 (Parts Sales, Marketing, and Logistic Division) of PT. Daya Adicipta Motora optimizes the customers' brand awareness of Honda Genuine Parts .
- b. Using Promotional materials Management System, H3 (Parts Sales, Marketing, and Logistic Division) of PT. Daya Adicipta Motora could manage the Promotional materials in a better manner and minimize stock difference.
- c. Promotional materials Management System allows the network (Dealer, Ahass, and General Store) to request Promotional materials to the Main Dealer.

5.1. RECOMMENDATION

For further development, it is suggested to perform receiving process of the promotional materials in order to improve the monitoring process.

VI. REFERENCES

- [1] PT. Daya Adicipta Motora . About. <http://daya-motora.com/about> (accessed 24 January 2020)
- [2] Fahrizal, Irfan., Hidayatullah, Syarif., Marhaeni. Sistem Informasi Manajemen Pergudangan Sparepart Berbasis SMS Gateway. Jurnal Rekayasa Informasi 2016; Vol 5 : 36.
- [3] Jabarullah, N.H. & Othman, R. (2019) Steam reforming of shale gas over Al₂O₃ supported Ni-Cu nano-catalysts, *Petroleum Science and Technology*, 37 (4), 386 – 389.
- [4] Nugraha, Ucu. Dkk. Analisis Sistem Informasi Pemasaran Produk Berbasis Web Dengan Pemodelan UML. Prosiding Seminar Ilmu Komputer dan Teknologi Informasi. 2017; Vol 2 No.1 : 126
- [5] Schach, Stephen. Object Oriented Software Engineering. 8th. New York : Ed, McGrawHill;2010.