WEBSITE DEVELOPMENT-BASED VIRTUAL REALITY AS MEDIA PROMOTION OF HONDA CAR

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ABSTRACT

Media promotion is a marketing or sales activities conducted by companies that make use of the media as a way of marketing and sales. One of the media that can be utilized by companies such as Honda Dealer Ahmad Yani products to promote his car through the website by applying virtual reality.

As for one of the problems associated with media promotion used by Honda Dealers Ahmad Yani in website to promoting car Honda HR-V displays only images of the exterior and specifications, it is underrepresented is of prospective consumers in identifying the Honda HR-V who want not only the exterior appearance, but also it's interior appearance. One of the solutions that can be used in addressing the issue is to how to implement virtual reality in the website of Honda Ahmad Yani, as with virtual reality can give you an idea of the interior of the Honda HR-V in its entirety to the prospective consumers, so hopefully in a way that can make a candidate more consumers recognize the Honda HR-V and are interested in purchasing Honda HR-V.

From the results of a questionnaire that had been granted against the respondent online, the system that has been built quite satisfying with 76,6% of the respondents claimed to simply helped by virtual reality applications implemented in the website to recognise the car Honda HR-V.

Keywords: Website, Media promotion, Virtual Reality, 3D, Honda HR-V, Honda Dealer Ahmad Yani

1. INTRODUCTION

Media promotion is a marketing or sales activities conducted by the company (goods/services) which utilizes the media as a way of marketing and sales, whether through the medium of audio, visual media or audio visual media that aims to boost sales of its products. This applies also to the Honda car dealership company Ahmad Yani who move on car sales. Media promotion with proper distinguishing element is one strategy that is able to enhance the marketability and competitiveness with other dealers. One of these promotional media that can be used by utilizing virtual reality

Based on the results of the interviews to the car dealership Honda Ahmad Yani marketing with Mr. m. Ramdani, for the latest exodus of Honda car i.e. Honda HR-V still less sales, namely to penjualanan Honda HR-V from February to March is as much as 60 units, whereas the target to be achieved by the Honda Dealer Ahmad Yani was as much as 50 units per month. With such data less for sale Honda masik HR-V when compared to other products. As for media promotion are used to promote the Honda HR-V with visual media, by way of handing out brochures to prospective consumers with housing-housing and go to save the brochure to the front of the House. In addition to other visual media were used to promote the Honda HR-V that is by way of setting up a stand at the supermarket or when there is a public exhibition, it would make sales should always be on the stand, and in conveying the information sales should trim the time when prospective consumers much.

Virtual reality is one of the audio visual media that can be used by the Dealer Honda Ahmad Yani to promote the Honda HR-V in introducing the Honda HR-V as the latest exodus of Honda cars, because with virtual reality can give you an idea of the interior of the Honda HR-V in its entirety to potential consumers. Application of the virtual reality will be applied on the website at the same time the development of the Honda car dealership websites from Ahmad Yani who not only contains company profile, but applying virtual reality applications in the website as a promotional medium car. Based on those described, it will be created a virtual reality applications that are applied in the form of a website with the title "Virtual Reality-based Website Development As Media promotion of Honda cars".

2. CONTENT OF THE STUDY

2.1 System Analysis

System analysis can be defined as the unravelling of an intact system into parts of its

components with a view to identifying and evaluating the expected needs of the proposed improvements so it can repair

1.2 *Website* Analysis

Website analysis is activities to analyze existing websites and used Honda Dealer oeh Ahmad Yani as one of the media used for the promotion of its products.

As for the Honda Dealer website Ahmad Yani to car promotional products which are marketed in the menu items, the menu there are a variety of car products being marketed, and one of them, namely car Honda HR-V. But in promoting the cars there are still shortcomings, namely less Interestingly display cars for prospective consumers, because it is only showing the display of pictures and specs of the exterior of the car. The way to product promotion Honda cars less represent the desires of prospective consumers who want the look of the exterior and interior, as well as the information contained in the cars.

1.3 Analysis Of The Problem

The analysis of this issue has been presented in chapter I that for media promotions through the website less attractive, because in giving information about the car Honda HR-V display only display pictures the exterior and its specifications. Such way underrepresented is prospective consumers who want the look of the exterior and interior, as well as more information on the car Honda HR-V compared to other cars.

1.4 Analiysis Of *Virtual Reality*

The analysis of virtual reality is the process of design in building virtual reality application that will be applied in the Honda Ahmad Yani in the website gives an overview of interior Ahmad Yani Honda cars that can be seen from different angles. As for the system to be built on the application of virtual reality to the interior of the Honda HR-V is as follows:

1. Virtual reality Applications this will be appliedto the Honda Dealership website Ahmad Yani. The application on the website of Honda Dealers Ahmad Yani can be seen in Figure 2.1

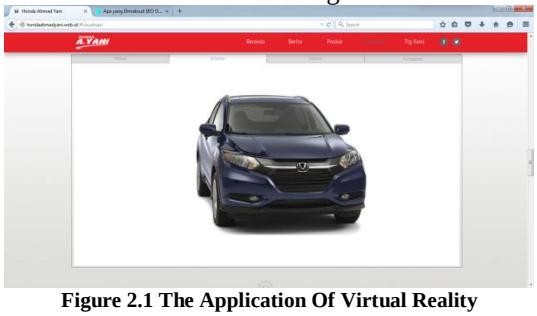
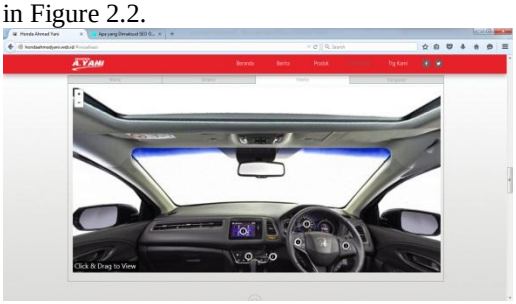


Figure 2.1 The Application Of Virtual Reality Applications On The Website

2. Virtual reality Applications will feature interior design from Honda HR-V. Perapan can be seen in Figure 2.2.



Gambar 2.2. Application Of Display Design Interior Honda HR-V

3. Untuk bisa melihat *design interior* dari Honda HR-V yang berupa 3D, pengguna cukup *click and drag mouse* komputer pada layar *design interior* Honda HR-V yang kemudian sistem akan merespon gerakan dari apa yang diinginkan oleh pengguna, sehingga pengguna bisa melihat dari berbagai sudut dan mengenali *design interior* dari Honda HR-V. Penerapan tersebut dapat dilihat pada gambar 2.3.



Figure 2.3 Application Of Display Design Interior Honda HR-V

1.5 Non Functional Requirements Analysis

Needs analysis of non functional analysis is needed to determine the specification of the needs of the existing system in the Honda Dealership Ahmad Yani. Non functional needs analysis includes a hardware analysis, analysis software and user analysis.

1.6 Hardware Analysis

The hardware specification aims so that in the development of virtual reality-based website can run well, then it takes the hardware that suits your application needs. Minimum hardware requirements dibutuhkanoleh Dealer Honda Ahmad Yani can be seen in table 2.1.

Table 2.1 The Minimum Hardware Requirements Specification required

No	Hardware	Specification
1	*Processor*	*Processor* dengan kecepatan 1.5 GHz
2	*Memory*	RAM 1 GB
3	*Monitor*	Monitor dengan resolusi 1024 x 768 pixel

No	Hardware	Specification
4	*Graphic Card*	VGA 512 MB
5	*Harddisk*	10 GB
6	Peranti Pendukung	*Keyboard*, *Mouse*, *Speaker*, Koneksi *Internet* 128 Kbps

1.7 Software Analysis

Software needs analysis is a factor that must be met in order for the development of virtual reality-based website can run well. The specifications of the software needed to run this virtual reality-based website can be seen in table 2.2

Table 2.2 The Minimum Software Specifications Required

No	Software	Specification
1	Sistem Operasi	Windows 7 Ultimate 32 bit
2	Browser	Mozilla Firefox 7.0, Google Chrome

2.8 Functional Needs Analysis

A functional needs analysis is conducted to provide an overview of the flow of data from the system to be built.

2.8.1 A Context Diagram

Context diagram is a simple diagram that illustrates the relationship of the system with the system environment. The following diagram is the context of virtual reality-based website Dealers Honda Ahmad Yani, can be seen in Figure 2.4

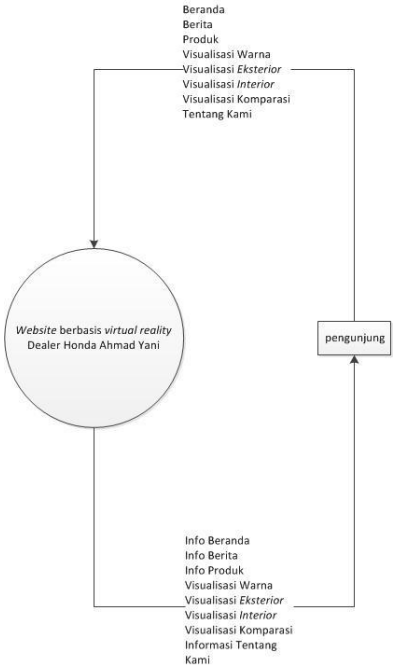


Figure 2.4 A Context Diagram

2.8.2 DFD (Data Flow Diagram)

Data Flow Diagram is a medium that is used to describe the flow of data that flows on a system. DFD level 1 of the system to be built can be seen in figure 2.5

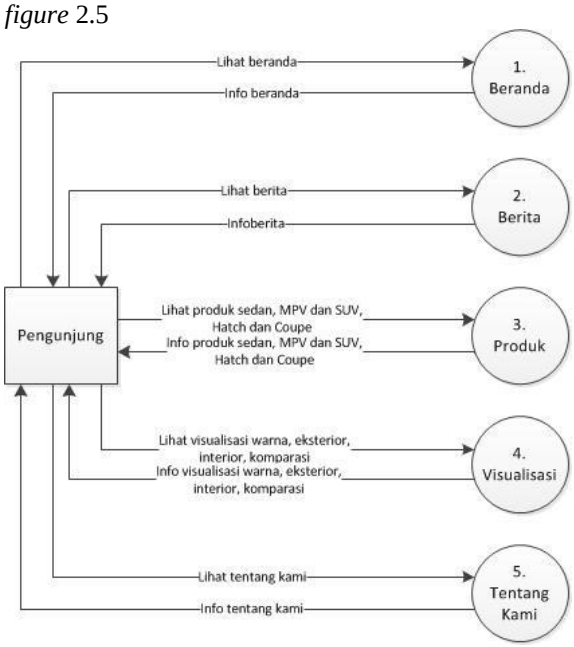


Figure 2.5 DFD Level 1

2.9 The Design Of The System

The design is a part of a software development methodology development after going through the stages of analysis. To be able to do the design of the system then do a few steps as follows:

1. The design of the Menu structure
   a) Menu structure of visitors
2. The design of software interface
3. Semantic Networks

2.9.1 The design of the Menu Structure

The design of the structure of the menu is the description of the path of the application usage, so that the application is easy to understand and easy to use. As for the structure of the menu can be seen in Figure 2.6

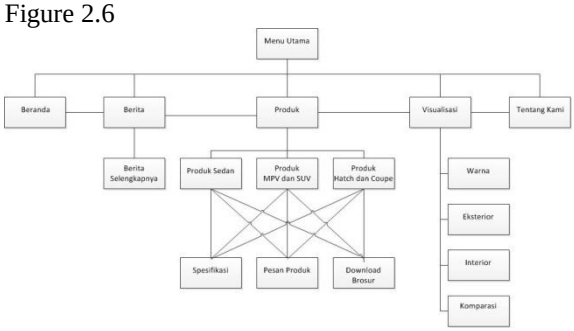


Figure 2.6 Menu Structure

2.9.2 The Design Of Software Interface

Interface design aims to provide an overview of the system to be built.

a) A Visitor's Home Interface Design

The design of the interface of home visitors can be seen in Figure 2.7

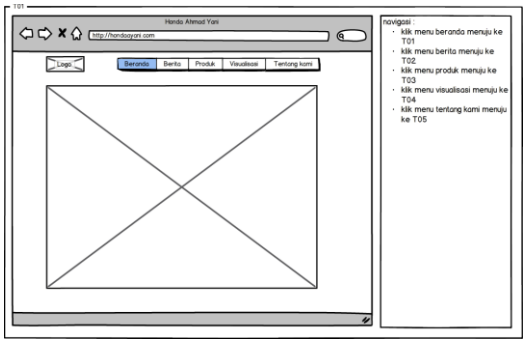


Figure 2.7 A Visitor's Home Interface Design

b) Interface Design News Visitors

The design of interface news on visitors can be seen in Figure 2.8

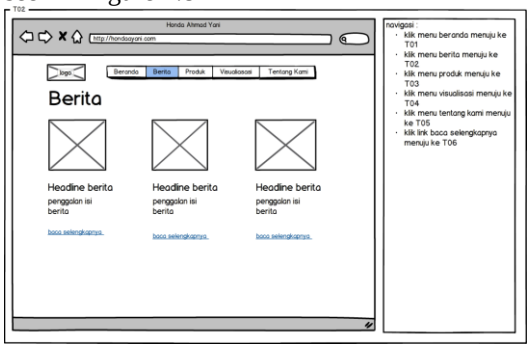


Figure 2.8 Interface Design News Visitors

c) Designing the interface Product Type Sedan Visitors

The design of the interface of the product at the visitors can be seen in Figure 2.9

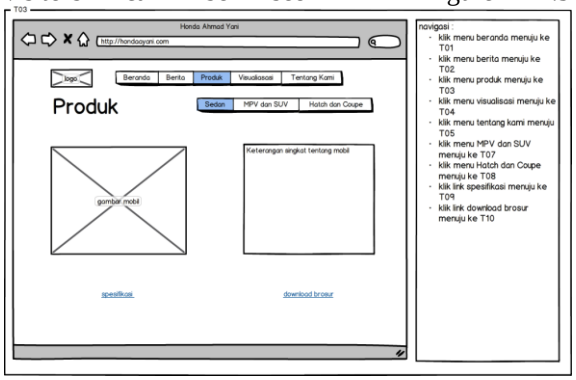


Figure 2.9 Designing the interface Product Type Sedan Visitors

d) Color Visualization Interface Design) HR-V Visitors

Design the visualization interface, HR-V color on visitors can be seen in Figure 3.0

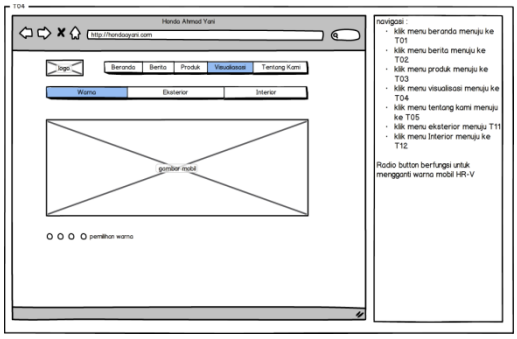


Figure 3.0 Color Visualization Interface Design HR-V Visitors

e) Interface Design about our Visitors

The design of the interface of our visitors can be seen in Figure 3.1

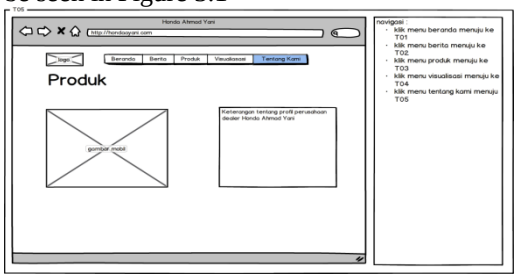


Figure 3.1 Interface Design about our Visitors

2.9.3 Semantic Network

The flow of the existing menus in the system will be explained on the image 3.2

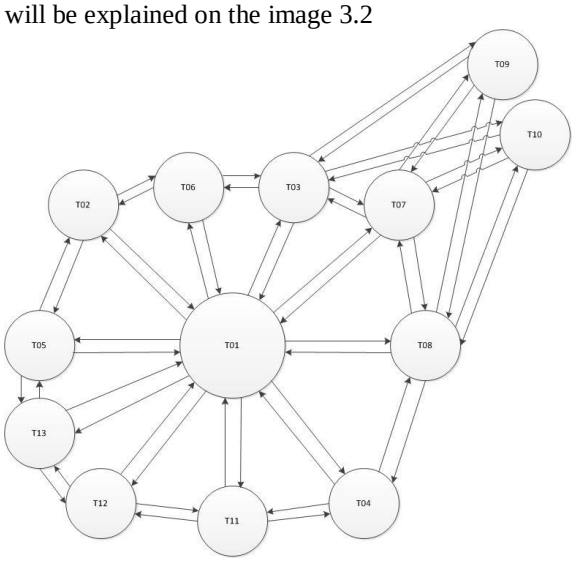


Figure 3.2 Semantic Network

2.10 Implementation and Testing

Implentasi and testing stage is a stage where the design is implemented in the programming language used. Once implemented then do testing. Stages of testing done to see the flaws that occurred on those applications for further system development.

2.10.1 Application Implementation

Website development-based virtual reality as media promotion of Honda cars is a website development from Honda dealership website Ahmad Yani before, where the development of this website operates on a Honda car promotion that not only contains pictures and its specifications, but the promotion of his car with a form of virtual reality especially for car Honda HR-V, where the Honda HR-V is one of the latest exodus of Honda products. As for the advantages of virtual reality for the car Honda HR-V i.e. prospective consumers could recognize the Honda HR-V good shape exterior or interior shapes.

2.10.2 Testing The System

Testing of this system is the most important stage is done to find flaws or errors in software that is on the test. Testing is intended to find out which software created meets the appropriate kritertia. The testing that was done that is alpha testing and beta testing

a) Alpha testing

In the pengujiaan function used to test application is alpha testing. Alpha testing is done using black box methods. Black box testing focuses on the functional requirements of the software consists of a pengujan plan and test cases.

Plan testing performed on Virtual Reality-based Website Development As Media promotion of Honda cars can be seen in table 2.3

Table 2.3 Black Box Testing Scenarios

Pengujian Pengembangan *Website* Berbasis *Virtual Reality* Sebagai Media Promosi Mobil Honda			
No	**Komponen Uji**	**Skenario Pengujian**	**Jenis Uji**
1	Berita	Tampilkan *Headline* Berita Honda	*Black box*
		Tampilkan Berita Selengkapnya Honda	*Black box*
2	Produk	Tampilkan Jenis Produk Mobil Honda	*Black box*
		Tampilkan Spesifikasi Produk Mobil Honda	*Black box*
		Tampilkan *Download* Brosur Produk Mobil Honda	*Black box*
3	Visualisasi	Tampilkan Visulisasi Warna Mobil Honda HR-V	*Black box*
		Tampilkan Visualisasi *Eksterior* Mobil Honda HR-V	*Black box*
		Tampilkan Bentuk Visualisasi *Interior* Mobil Honda HR-V	*Black box*
4	Tentang Kami	Tampilkan *Company Profile* Dealer Honda Ahmad Yani	*Black box*

b) *Beta* Testing

Beta testing is the testing that was done objectively which is done directly, with the purpose to find out the extent to which the quality of the system. Beta testing is done by examination of the respondent or prospective users of the system to know the assessment of prospective users of the system to the system that has been created.

Beta testing is done by means of a detailed questionnaire made online and target prospective users of the system i.e. Honda car community forums on the internet by limiting the 20 respondents, this is done to find out the assessment given to the Honda car dealership Website Ahmad Yani-based Virtual Reality as a medium of promotion, and become the main namely the valuation on the menu the menu because visualization is a form of visualization of the car Honda HR-V as a car that wants to be promoted by the Dealer Honda Ahmad Yani through the website. In addition beta testing is also done by conducting interviews to m. Ramdani as part of marketing in the Honda Dealership Ahmad Yani.

The testing techniques used used in this beta testing is a technique of the scale likert. For each question on the questionnaire will get a point a different assessment. The following table point assessment can be seen in table 2.4

Tabel 2.4 *Point* Penilaian

Jawaban	Skor
Sangat Setuju	5
Setuju	4
Ragu-ragu	3
Tidak Setuju	2
Sangat Tidak Setuju	1

To find the percentage of each answer a detailed questionnaire likert scale formula used as follows:

$$P = \frac{S}{SkorIdeal} x100\%$$

Description :

P : Percentage values to search

S : The number of frequencies multiplied by the score assigned answers

The Ideal Score : The highest value is multiplied by the number of samples

Highest value : 5

The Number Of Samples : 20

The Ideal Score : 5x20=100

3. COVER

3.1 Conclusion

Based on the results of the research that has been done, the author can eventually draw conclusions based on questionnaires given to the Honda community on the internet by taking 20 respondents, virtual reality-based website as media promotion of cars Honda in this visualization on the menu found on the website Dealaer Honda Ahmad Yani quite helpful Honda Dealer Ahmad Yani .:

1. Can promote the Honda HR-V through the website with a percentage of 76,6%.
2. Can introduce Honda HR-V as the newest cars out of Honda.

But to increase sales of the Honda HR-V could not be measured because it hasn't seen sales of the Honda HR-V through this virtual reality based website.

3.2 Saran

In the development of virtual reality-based website as media promotion of the car this Honda realized was far from perfect and there are still many shortcomings. Therefore, he had to do the development and further refinement in order to meet the needs of the users of the website. As for the suggestion toward further development of virtual reality-based website is namely the admin menu for data processing such as data processing data processing of news and news from websites based on the virtual reality

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