Potential of Cari Rumah Software to Brings House Product Consumer and Digital Marketing Tool

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Article Info	***ABSTRACT***

Growth of residential areas in the city of Mataram and its surroundings has a tendency to continue to increase. The growth of residential areas is in line with population growth which reaches 1,842%. Emergence of new residential areas in the city of Mataram and its surroundings involve a lot of amount of housing developer companies. Wide distribution of new residential/housing areas has in potential consumers having to make special efforts to obtain information on the purchase of new house. Cari Rumah software provides online search services for new residential products to the public using smartphone devices. The software makes it easier for prospective consumers to get information on new residential products without having to go to the marketing office of housing developer companies one by one. The Cari Rumah software can also function as a means of marketing new residential house products by housing developer companies. Cari Rumah software offers convenience in finding new residential house product provided by housing developer companies. The content owned by the Cari Rumah software has the possibility as a means of digital marketing in addition to the function of helping potential consumers. This search study aims to find out the potential of the Cari Rumah software to meet the information needs of potential consumers and possibilities be used as a means of digital marketing. Method used is an impression test of the Cari Rumah software. The main stages of this method are gathering information, impression test, and potential conclusion. Results obtained indicate that the Cari Rumah software is not sufficient to meet the information needs for users / potential consumers of residential house product. However, 83.94% of users of the Cari Rumah software recommend to developer criteria features. Potential use of the Cari Rumah software as a digital marketing tool only reaches 20.15%.

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1. INTRODUCTION

Growth of residential areas in the city of Mataram and its surroundings has a tendency to continue to increase. In the theory of human needs expressed by Abraham H. Maslow, defines that basic needs are clothing, food, shelter, education, health are need that are at the basic level for humans [1]. Housing is one of the basic human needs that have an impact on the demand for housing [2]. Along with population growth, housing demand availability will be increased [3]. The population growth of Mataram city around 1.842% those condition requires an increase in the availability of housing [4]. This is in accordance with the law of supply and demand. The increasing housing need will increase the more developers compete to provide housing products.

Choosing and determining a new home to buy is not quite easy. Several factors influence decision making to choose a new house for buy [5]. Various criteria are taken into consideration to determine the choice and carry out the transaction. Considered criteria is price, land area, time and distance to the important objects, type of building, public facilities and access to housing area [5]. These factors are quite complicated in making considerations and making decisions. Based on the search, potential consumers also have a major factor in determining the location and new residential house product for choose and buy 6. The availability of the Cari Rumah software by online is an offer of convenience on getting housing information for potential consumers of new residential house product. Cari Rumah software provides online search services for new residential house product for the public using smartphone devices [6]. The availability of the Cari Rumah software makes it easier for potential consumers to get new residential house product information without having to go to the marketing office of housing development companies one by one. Information content in the software can play a role as a means of marketing communication [7]. The other hand, the use of the Cari Rumah software can function as a means of marketing new residential products by housing development companies [8].

Todays marketing utilizes the internet as a means of conveying product information [9]. Web pages and service application programs related to sold product is basically capable of being a digital marketing tool 10. The digital marketing basically connects consumers and product providers using various means of digital information and communication [11]. Based on these references, the Cari Rumah software has potential as a digital marketing mean in addition to the function of helping potential consumers. This study aims to find out the potential of the Cari Rumah software to meet the information needs of prospective consumers and possibly be used as a digital marketing tool. Method used is an impression test to the Cari Rumah software. The main stages of this method are gathering information, impression test, and potential conclusion. Expected result is an illustration of the ability of the Cari Rumah software in bringing potential residential house consumers closer and its potential as a digital marketing tool.

2. RESEARCH METHOD

Method used in this study is accordance to the illustration on Figure 1. This method is used to search for the existence of the Cari Rumah software for the needs of its users and as a digital marketing tool. An important step in this method is an impression test of the Cari Rumah software. Software acceptance by user needs to be known to measure the software suitability to the user needs [12] . Impression test can be used to found the feasibility of a product based on direct user responses [13]. Impression test is used to determine the software acceptance by its users. Respondent for the purposes of this impression test is direct users [14]. The users referred to in this case are public users who take advantage of Cari Rumah software to help obtain information on residential house product for be selected and purchased. Residential houses in this discussion are new home products made by the provider company or commonly referred to as housing developers.
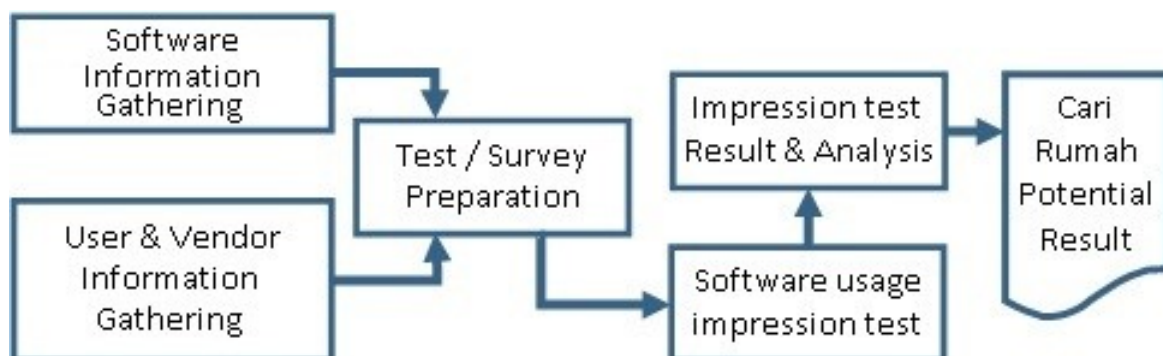

Figure 1. Method

Study scope is accordance with the scope of data presentation provided by the Cari Rumah software up to July 2022 [15]. Data coverage area is a new residential area around the city of Mataram [6]. This area is an area located on the Mataram city suburban and other regency areas which are directly adjacent to the Mataram city area.

2.1. User and Vendor Information Gathering

Main user of the Cari Rumah software is everyone as a potential consumer of residential house product. Information from prospective users of the application program is needed to get an initial illustration of the information needs for searching for residential products. This information is an initial reference to the existence of the Cari Rumah software. Vendor is a residential product provider company is a housing developer. The vendor information required at the beginning is a content reference that should be in the Cari Rumah software. Information gathering about users and vendors are by using questionnaires and interviews. Information gathering required from the vendor is broadly related to the need for providing product information and marketing purposes. The main information needed is [6][8]:

a) residential house product information,
b) variety of information conveyed to potential consumers,
c) marketing media ever used,
d) how to introduce residential house product to potential consumers,
e) how potential consumers find out about residential house product that are made and offered,
f) factors that prospective consumers consider in choosing and determining the purchase of a new home,
g) way of potential customers order the desired residence.

Information collected from potential consumer is basically based on their needs in choosing and determining residential areas and residential products. The information is based on a collection of potential customers and information obtained from marketing practitioners for residential products [6]. The main information that comes from potential customers are :

a) the means used by potential consumers in finding housing information,
b) factors to consider in selecting and determining prospective residences.

Information gathering for users and vendors is used as a tool to test the availability of content and work functions of the Cari Rumah software.

2.2. Software Information Gathering

Software information gathering is the stage to get information about the menu and work functions of the Cari Rumah software. The Cari Rumah software is now available online. That software has two operation sides, namely the vendor side (backend) and the user side (frontend). The backend side is used for data management purposes for residential products (new) and the housing developer company [15]. The frontend is the part of the application that is operated using a gadget with the Android operating system. Backend side of the application program has the basic function to manage residential product data, accordance to the developer company [6]. This application program section contains menus, user personalization (/vendors), filling in company data/info and housing project locations, filling in residential product data, house product specifications, displaying residential housel product list, and housing location information [6].
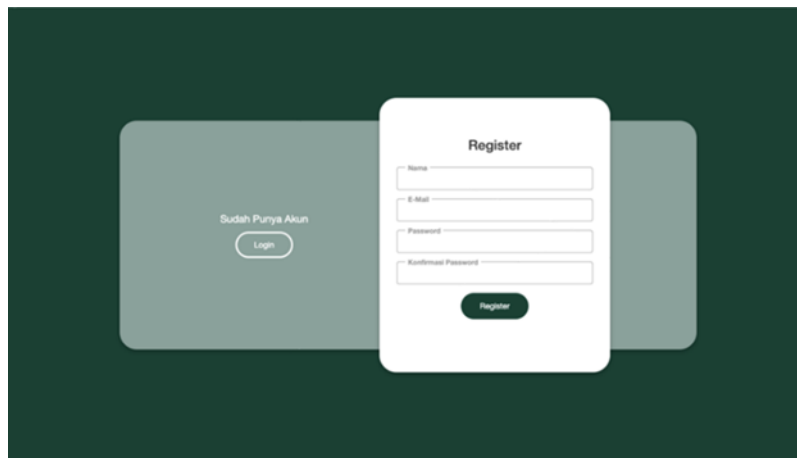
Figure 2. Personality Interface Menu [6]

Figure 2 illustrates the backend section on the first view accessed. That interface presents the personalization of the use of application programs for data management of housing products

Figure 3. Product and Company Data Entry Menu [6]

Figure 3 is a entering interface form to enter housing product data based on the housing developer company. This menu contains general data for housing development companies, product specifications for residential homes, selling prices, service contacts and location pointers based on online maps. Online map used using Google Map service.
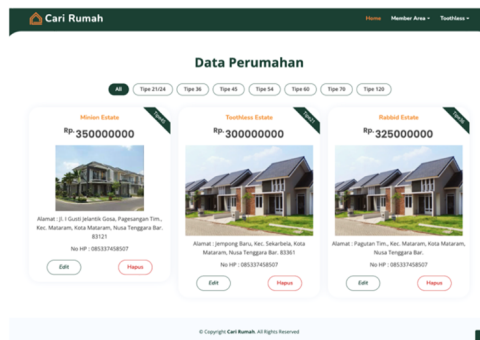
Figure 4. Product List Appearance Menu [6]

Figure 4 is an interface to display residential product data that has been entered into the Cari Rumah software. The display in the form of a list of residential products is used as a control media for the results of data entry for residential house product.

Figure 5. Product Specification Appearance Menu [6]

Figure 5 is an interface that displays information on the prepared residential house products. The display in Figure 5 illustrates the presentation of complete residential product information, location, specifications, service contacts, addresses, and location pointers using online digital map. Frontend part of the application program has basic functions of displaying product information and search facility. The frontend part is operated with gadget/smartphone hardware with Android operating system [15]. This application program section contains menus, search for residential products based on criteria, displaying of residential house product information based on search criteria as well as location information based on search results. The search criteria are based on:

a) position of users / potential customer,
b) distance range based on the reference position of potential customer,
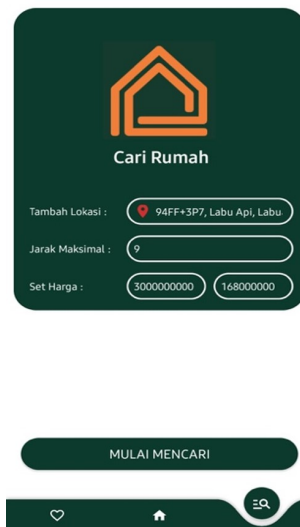c) house product selling price.

Figure 6. Residential Product Searching Menu Appearance [15]

Figure 6 is a search menu interface display using a smartphone device. The search menu is the main element in Cari Rumah software. In this search menu, 3 (three) search criteria are used as a reference for search process.
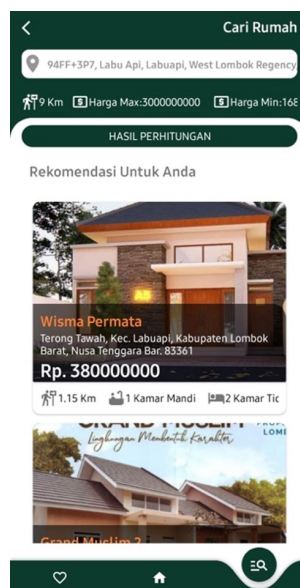

Figure 7. Searching Result Appearance [15]

Figure 7 is an interface display that presents search results. The presentation of search results is displayed in a list of residential house product that matches the criteria that have been pinned.

Figure 8. Residential Product Detail Information Appearance [15]

Figure 8 is an interface display that presents detailed information on residential house product based on a list of search results. This detailed menu displays residential house product information, product descriptions, product specifications, prices, services contact and location information

Figure 9. Appearance of Housing Area Location Information [15]

Figure 9 is an interface display that displays location information by geographical position. The location information is accordance to the residential location area based on the search result in which completes the detailed information for each residential house product. The location map is presented based on a map sourced from Google Map which is related to housing data.

2.3. Test/survey Preparation

Test/survey preparation is the formulation stage to prepare all needs for the impression test stage. This stage is determine the content (/point) of the Cari Rumah software testing in order to obtain data on the results of the usage test and user responses. The test subjects of the software are public users, namely prospective consumers of residential house product or people who are interested in buying new houses. Test orientation is based on the user's point of view. Main content is formulated based on the results of the initial information gathering stage and public responses. The main types of content that are used as references to obtain usage information are:

a) software operational and availabilities of features,
b) suitability of information search criteria,
c) software user feedback and respond.

1. Operation and features

Information to be obtained from the user feedback group about the operations and features contained in the application program are :

a) application download and install techniques to prepare software operation,
b) ease of use search menu,
c) completeness of information on search results.

2. Information suitability

Information to be obtained on the user response regarding to use of the search criteria contained in the software are :
a) search results on the software according to the criteria,
b) criteria that have been prepared are in accordance to the needs.

3. Feedback and respond

Information to be obtained on the user feedback contained in the software impression are :
a) web-based software, without download and install for preparation,
b) use of other search factors/criteria,
c) requires interaction feature between potential customer and housing developer company

2.4. Software Usage Impression Test

Impression test stage to Cari Rumah software is carried out with provisions and techniques that are oriented toward the software user. The object of impression test is Cari Rumah software on the frontend part, accessing address on https://carirumahaja.site/. The software users are potential consumers of residential house product or the people who are interested in buying new houses.

1. Equipment

Impression test equipment :
a) smartphone,
b) Android operating system.

2. Impression test implementation

Impression test was carried out personal by personal :

a) operating the Cari Rumah software by user,
b) respond and feedback gathering information after software usage.

2.5. Result and Discussion

Result and discussion stage is managing data step to get results of the impression test as well as discussion to get a conclusion. The results and discussion are reviewed based on the responses of users of the Cari Rumah software based on user appreciation. Those will influence to this software possibility as a digital marketing tool.

3.   RESULT AND ANALYSIS

3.1.   Result

Based on the methodological steps according to Figure 1, impression test result is obtained. The test results are basically based on the use of the Cari Rumah software on the frontend part. The results of the impression test are in accordance with the steps in the method, namely the user is given the opportunity to use the Cari Rumah software as well as user response collecting to the context and content of the Cari Rumah software.
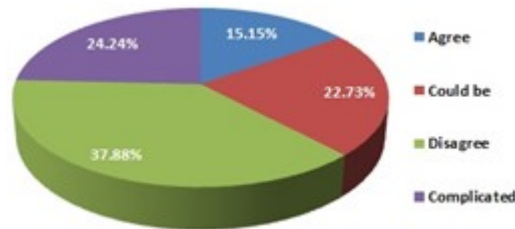

Figure 10. Graph of Operation Setup Response by Downloading and Installing

Figure 10 shows the impression test result on the Cari Rumah software pre-operational and usage. The operational steps of software by downloading and installing received a response of 62.12% in which was not accepted by users. The preparatory stage before use is considered a complicated.

Figure 11. Graph of Ease of Use Search Menu

Figure 11 shows the impression test result on the ease of use of the search menu in the Cari Rumah software. 66.67% of users stated the ease of use and 22.73% responded very easily.
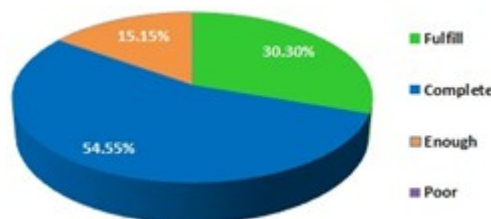

Figure 12. Graph of Completeness of Search Result Information

Figure 12 shows the impression test result on the completeness of information on the search results. The Cari Rumah software received a response from 84.85% of users who were able to meet their information needs based on the available search features.

Figure 13. Graph of Suitability of Search Results Against Criteria

Figure 13 shows the impression test result on the search results on the application according to the criteria features that are already available in the Cari Rumah software. 92.42% of users agree if the search results match the search criteria provided in the application program.

Figure 14. Graph of Suitability of Search Criteria with Needs

Figure 14 shows the impression test result on the search criteria provided by the Cari Rumah software. 75.76% of users think that the search criteria that have been prepared have not fully met their needs.
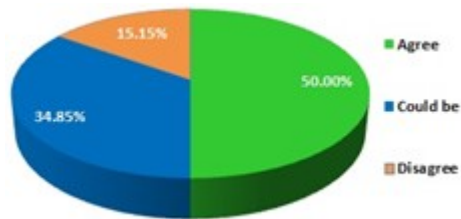

Figure 15. Graph of Web-based Software Need

Figure 15 shows the impression test result on the use of the Cari Rumah software on a web-based basis, without downloading and installing it first time. 84.85% of users accept the technique of software operational without having to download and install.
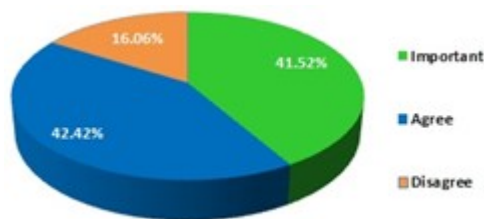

Figure 16. Graph of the Need to Use Other Factors/Criteria

Figure 16 shows the impression test result on the need to use search factors/criteria other than those already available in the Cari Rumah software. 83.94% of users recommend to give additional search criteria in which besides available.
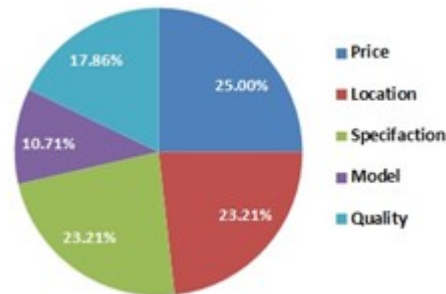

Figure 17. Graph of Search Criteria Development Recommendation

Figure 17 shows the factors/criteria alternative as a proposed development of the Cari Rumah software. 5 (five) search criteria highest recommended are price factor needs to be balanced with the location factor, house product specifications, house model, and quality for new residential house.
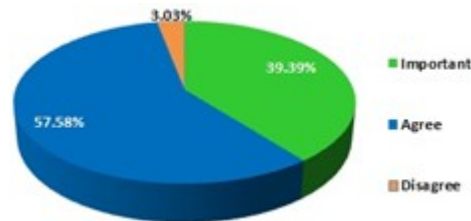

Figure 18. Graph of Need for Interaction Features with Developer Companies

Figure 18 shows the impression test result regarding the need for interaction features with the developer company. 96.97% of users feel it is important to be able to interact with companies that provide new residential house product.

3.2. Discussion

Impression test can provide an illustration of an object/product that is used based on direct user responses [13]. Based on the impression test result, it is obtained an overview of the Cari Rumah software potential in meeting the needs of users (/ potential consumers) and the feasibility for digital marketing tool. Basically, information content in the software can be used for marketing communication digitally [7]. The feasibility of digital product information media is important to bring the relationship of potential consumers closer to residential products [10]. The impression test results are discussed in combination and calculated together based on the same test components.

In operational, the Cari Rumah software is quite acceptable to users. 89.39% of users find it easier to search for residential house product. 84.09% of users respond that the available content is able to show search result information that matches the search key. User responses in software operational are inversely proportional to conditions when used. 62.12% of users are not comfortable with the use that requires going through the download and installation stages. 84.85% of users gave the opinion that web-based software is enough and can be accessed directly without having to download and install it first. Paying attention to the data representation about the use of Cari Rumah software, it can be concluded that this application program is quite acceptable to users and quite capable of serving. Digital marketing is carried out to promote and provide product information to potential consumers [11]. Information content in the software can be used housing developer company to fulfill product information need for consumers [16]. The content of Cari Rumah software needs to be reviewed to find out its potential as a digital marketing tool. 75.76% of users think that the Cari Rumah software has not met their real needs. 83.94% of users gave suggestions to develop the search feature again. 96.97% of users gave recommendation to develop the Cari Rumah software completed a feature of direct interaction between consumers and housing developer company. Taking into account the data from the impression test, the fulfillment of the information needs of users / potential

consumers is only 20.15%. These results indicate that the Cari Rumah software is not sufficient to meet the information needs to users / potential consumers of residential house product.

4. CONCLUSION

Based on the study results, it can be concluded that the Cari Rumah software is quite capable of serving the needs of searching for new residential house product. The feasibility of the Caru Rumah software for digital marketing purposes does not yet have sufficient potential. 1.Based on the content of information search, 83.94% of the study results show that the Cari Rumah software requires the development of criteria features. 2.Potential use of the Cari Rumah software for digital marketing purposes is only reaches 20.15%.

5. DECLARATIONS

AUTHOR CONTIBUTION

All authors contributed to the writing of this article

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COMPETING INTEREST

The authors declare no competing interests regarding the data presented in this research.

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