

Needs Identification for Hospital Digital Marketing Design: How Deep Is Your Empathy?

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ABSTRACT

The application of digital marketing has been widely used in the business world today, including in hospitals. Not only for promotion, but digital marketing can generate customer awareness of a product or brand and can increase the brand image and reputation of a product or brand. The design thinking method can identify the needs of customers and companies more deeply and comprehensively. By implementing empathizing and defining stages, hospital digital marketing can be designed to involve customers and fulfil their needs. Hospitals need to implement a digital marketing strategy to convey information about health services offered and programs promoted. This study aims to identify the level of need in designing digital marketing strategies for hospitals with design thinking methods, particularly in empathize and define stages. This study uses a qualitative approach through the empathize stage, which includes observation and interviews with both customers (current patients) and hospital employee. Next, the data obtained is processed and analyzed using empathy maps and personas, then grouped in affinity diagrams to understand the needs in designing digital marketing strategies for hospitals.

Keywords: Design thinking, Empathy map, Persona, Social media, Hospital.

1. INTRODUCTION

According to Law No. 44 of 2009 concerning hospitals, a hospital is a health service institution that provides comprehensive individual health services that provide inpatient, outpatient, and emergency services. The number of hospitals in Indonesia and all types of health-related businesses is increasing rapidly, not to mention the exposure of foreign health facilities, which are very intensively penetrating the Indonesian market (MediaIndonesia, 2022). Various technology-based digital transformations have occurred not only in equipment and diagnostics but also in management, health services, and administration (Iyanna et al., 2022).

Digital marketing is defined as the use of digital channels, including websites, social media, email, and applications, to promote a product or service. It covers a variety of tactics, including Search Engine Optimization (SEO), Pay-Per-Click (PPC) advertising, social media marketing, email marketing, and also content marketing (Chaffey & Ellis-Chadwick, 2019). Digital marketing allows businesses to connect with customers through digital channels, collect data about consumer behavior, and use it to optimize customer experiences and increase sales (Ryan & Jones, 2016).

Digital transformation in a business is now a much-needed change, including in the health business (Iyanna et al., 2022), and has implications for managerial strategy (Fernandez-Vidal et al., 2022). Digital marketing in hospitals is a necessity to survive in the era of digital disruption (Ilyas & Sulistiadi, 2022). The use of digital marketing can provide information about quality healthcare services and increase patient satisfaction, thereby strengthening the brand image of the hospital (Burhan & Sulistiadi, 2022).

One method that can be used to design a digital marketing strategy is design thinking. Design thinking is a human-centered approach to innovation that draws from the designer's tools to integrate human needs, technological possibilities, and requirements for business success (Kelley & Brown, 2018). Design thinking is believed to be able to produce rich, structured, and in-depth data by conducting deep interviews and dynamic focus group discussions (Georgiev & Georgiev, 2023; Mortati et al., 2023). Design thinking has been used in the innovation process in various fields, such as in product design (Liu & Lu, 2020), marketing strategy design (Aziz et al., 2021), website development (Herfandi et al., 2022), and circular business model design (Santa-Maria et al., 2022). Accordingly, design thinking has been proven to be an effective way to innovate and meet needs – including in the health sector (Bretaña et al., 2023).

Digital marketing studies have been conducted; however, they were often carried out by hospitals that have been operating for a relatively long period of time (Andriani, 2023; Burhan & Sulistiadi, 2022; Bretaña et al., 2023; Hariyanti et al., 2023; Ilyas & Sulistiadi, 2022; Insani & Nurdan, 2022). Therefore, this research aims to identify the need for and importance of digital marketing strategies in newly operating hospitals using the design thinking method. Empathize is the first and critical stage of design thinking because customers' needs and wants can be identified at this stage, as well as what customers have felt and experienced so far. The data obtained from the Empathize stage will become input for the Define stage, where the data will be grouped to understand the focus of the problem. Thus, this article discusses Empathize and Define stages. The results of this research contribute to how to identify and analyze the needs and wants of hospital customers, which can be a reference in designing appropriate and effective digital marketing strategies.

2. RESEARCH METHODS

This research uses a case study at a new hospital in Surabaya that has been operating since 2023. This research also adopts design thinking for data analysis. Design thinking involves five stages as follows (Herfandi et al., 2022):

1. Empathize stage aims to understand how the customer does something, what the customer's physical and emotional needs are, what is important to the customer, and how the customer thinks about the design that will be created, referring to the context involved.
2. Define stage is grouping and clarifying any challenges experienced in the previous process to determine the focus related to solving problems so that the desired product can be designed according to customer needs.
3. Ideate is the stage of determining ideas or solutions to customer problems and needs from the previous stage. The ideas or solutions will be used in the next stage to improve the object being analyzed and also create sketches.
4. Prototype is the stage to create a prototype of desired product based on the design ideas collected from the previous stage. At this stage the results can be anything that will later allow for interaction by the customer. This stage is also a place for improvements to be closer to customer needs.
5. Testing is the final stage, in the form of a process of testing improvements designed in the previous stage for customers. This stage obtains feedback from customers to design and develop better products.

This research uses a qualitative approach through observation and in-depth interviews. Data in the initial stage (Empathize) were collected from ten respondents, including five hospital customers, four hospital employees, and one hospital manager. Next, data were mapped using empathy maps and personas that would be continued to the next stage (Define) to find out what main problems of digital marketing faced by the hospital. The results from this stage can be used to design a relevant and effective digital marketing strategy for the hospital. For these reasons, this paper is limited to the Empathize and Define stages of the design thinking method. Figure 1 shows the research framework.

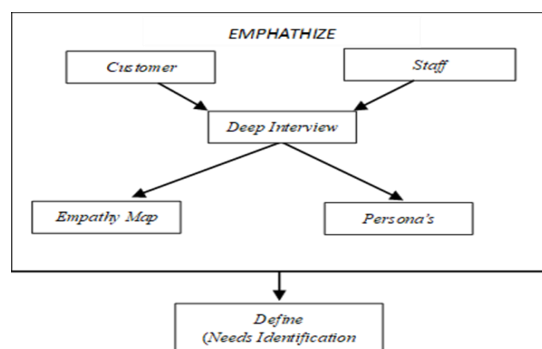


Figure 1. Research Framework

3. RESULTS AND DISCUSSION

3.1. Respondents' Profile

As can be seen in Table 1, the five customer respondents are, on average, 30-50 years old and live in Surabaya. They usually access their gadgets for more than four hours a day, and all respondents have WhatsApp (WA), apart from Instagram and Tiktok. Regarding the hospital's social media, four respondents knew about this hospital's Instagram. Meanwhile, the employee respondents were aged 25-35 years, from the human resource department (HRD) and marketing department of the hospital. All employee respondents live in Surabaya and have various kinds of social media. They use gadgets an average of 2-4 hours per day.

Table 1. Respondents' Profile of Customer and Employee

Variable	Answer	Customer	Employee
		Frequency	Frequency
Age	21-30 years old	0	3
	31-40 years old	2	2
	>40 years old	3	0
Gender	Male	2	2
	Female	3	3
Work	Entrepreneur	2	Marketing (3)
	Others	3	HRD (2)
Address	Surabaya	3	5
	Outside Surabaya	2	0
Which social media do you use?	WhatsApp	5	5
	Instagram	4	5
	Youtube	3	4
	TikTok	3	5
	Facebook	2	2
How many hours a day do you play gadgets?	1-2.99 hours	0	2
	3-4.99 hours	3	3
	>5 hours	2	0
Which this hospital social media do you know?	TikTok	0	5
	Instagram	4	5
	Youtube	0	4

3.2. Empathy Map

Several interviews were conducted with five customers who were registering or waiting for medication and also with four employees and one manager. An empathy map was then created based on the results of the interviews. An empathy map is a collaborative visualization to articulate what is known about certain types of customers (Gibbons, 2018). This tool can help to create a shared understanding of customer needs and assist in decision-making. There are four quadrants that are the basis for making an empathy map: (i) Quadrant 1 (Hear) explains what a customer has heard about a business or object based on what has been experienced, (ii) Quadrant 2 (See) describes a situation or condition that has been seen in a particular object or business based on what has been experienced, (iii) Quadrant 3 (Think and Feel) contains what a customer feels and thinks based on experiences that have been experienced, and (iv) Quadrant 4 (Say and Do) explains something that a customer wants to convey and desires based on what has been experienced.

**Figure 2.** Empathy map of customer and employee respondent

An example of an empathy map from one customer is shown in Figure 2. It can be concluded that the customer learned about this hospital from a relative. He also said that hospital social media should provide interesting informative content to attract customers. Additionally, he wants to get health tips from the hospital's social media. Figure 2 also shows an example of an empathy map from one of the employee respondents. It can be seen the employee feels that the role of digital marketing is important. He proposed creating educational content and collaborating with influencers to increase the reach of potential customers.

3.3. Persona

Next, a persona of each respondent was created based on the results of the interview. Persona is a tool that determines the context, motivation, and needs of the target user (Laubheimer, 2020). Examples of personas from customer and employee respondents are shown in Figure 3. Apart from explaining personal data, personas also explain their purpose in going to this hospital and tell about the problems or challenges they have experienced so far.

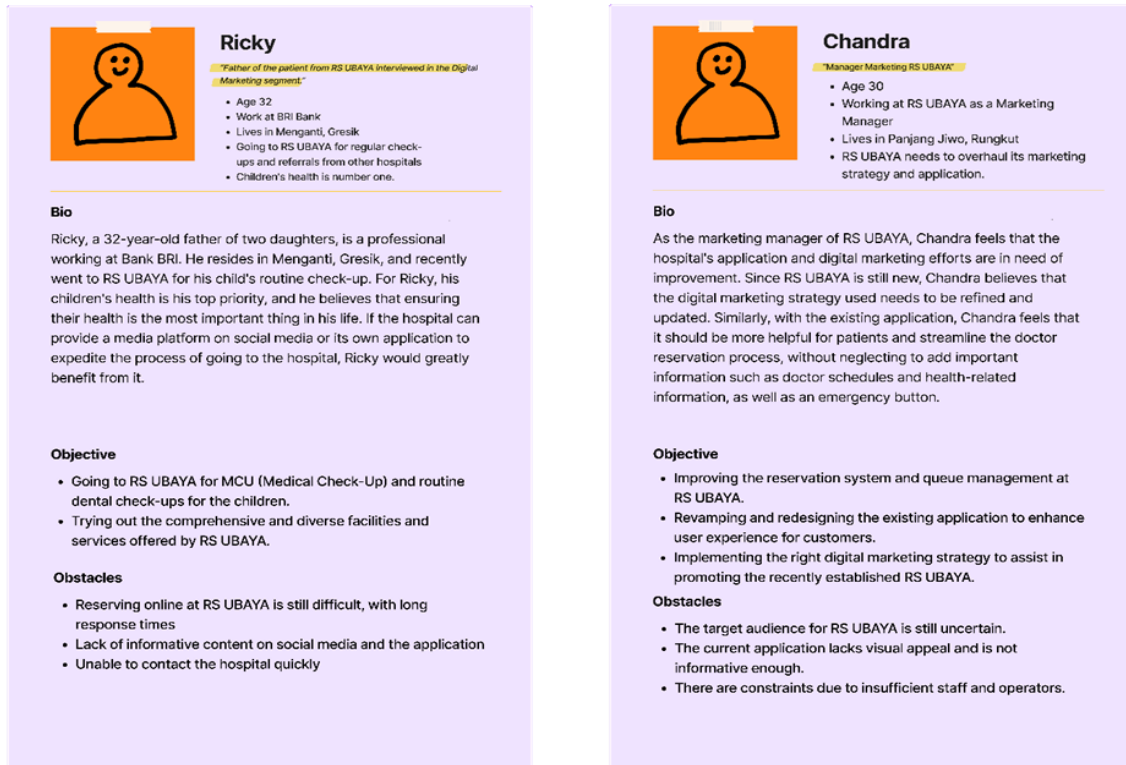


Figure 3. Persona of customer and employee respondent

3.4 Define

Define is the next stage after the Empathize stage in design thinking. The process at this stage is carried out to clarify problems and obstacles felt by users in using the hospital facilities by combining the information from empathy maps and personas using an affinity diagram. Figure 5 shows the affinity diagram of customers' data, while Figure 6 presents the affinity diagram of employees' data.

After integrating the two tools used in the Empathize stage (empathy maps and personas) and the affinity diagrams, several needs were identified, such as redesigning the existing application with a more attractive design and color scheme to make it easily accessible to all users, creating a new strategy to improve digital marketing to reduce complaints experienced by users, wanting to have emergency features that can respond quickly in urgent situations.

The needs of customers and employees of the hospital regarding digital marketing can be identified as follows:

1. A requirement to get information regarding the doctor's schedule, which should be updated at any time.
2. A requirement to obtain information about health and first treatment for certain diseases on hospital social media.
3. A desire for the hospital's website to be more informative and varied.
4. A desire to find out information about hospitals on social media.
5. A desire that the hospital's Instagram can be improved to be more informative and active.
6. A requirement for faster response time on WA and standard response times should be determined, as well as complete information when serving customers.
7. A desire for new strategies to improve digital marketing to reduce complaints experienced by customers.
8. A desire to hire employees to make hospital social media more effective.

From identifying the needs and interests of customers and employee, several suggestions can be recommended to this hospital for digital marketing strategies, namely:

1. Utilize the website as a means of providing information and reservations. Hospital websites are very important because they can provide various benefits and conveniences for customers, medical personnel, business partners, and the general public.

2. Redesign or add features and information that can be useful for customers before coming to this hospital or after a doctor's visit. To accommodate it, contents on hospital social media (website and Instagram) should be more attractive and informative.
3. Consider recruiting specialized employees or experts who can effectively manage digital marketing strategies. This may involve professionals in IT, multimedia, photography, or individuals with specific skills in digital marketing. With competent human resources in this field, the marketing process at this hospital can be more active and optimal in accordance with the goals and targets that have been set.

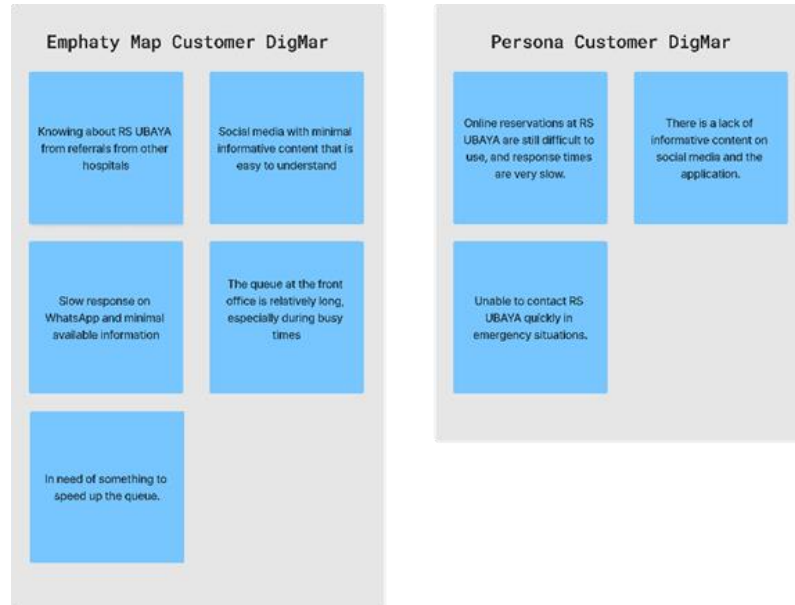


Figure 4. Affinity diagram of customer respondents

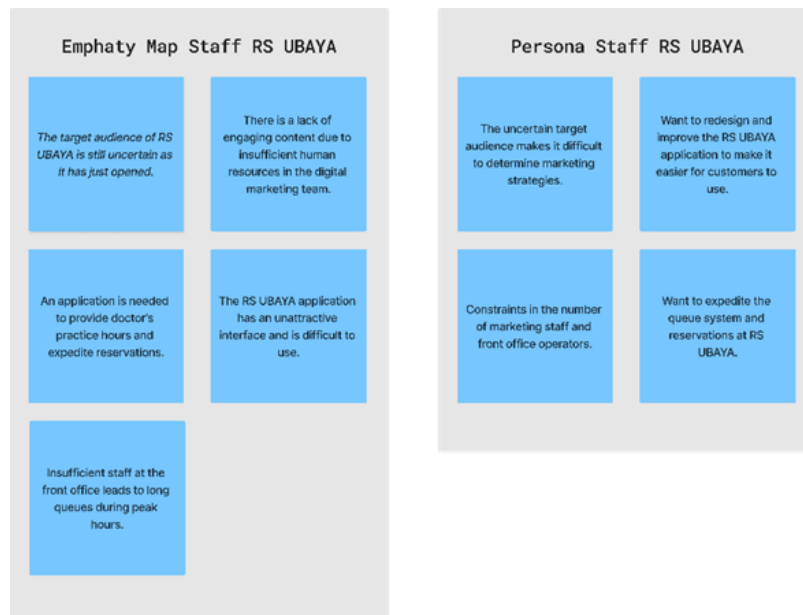


Figure 5. Affinity diagram of employee respondents

4. CONCLUSIONS, CONTRIBUTIONS AND LIMITATIONS

Identifying the needs and wants of customers who will use digital marketing is necessary for designing a relevant and effective digital marketing strategy. Design thinking can be utilized as an effective method for understanding customer needs and wants because it is human-centered. From observations and interviews, which are part of the Empathize stage, the empathy maps were created to identify what customers hear, see, think and feel, as well as what they say and do. Then, the personas were developed to describe the customers' purposes for coming to the hospital

and the obstacles they have experienced so far. Next, in the Define stage, the data that has been collected was grouped using an affinity diagram to understand which digital marketing is needed according to the customer needs and wants. Several suggestions were recommended from this identification, including using websites as a means of providing information and reservations, creating and posting more informative and attractive content on the hospital's website and Instagram, and hiring an expert to manage the digital marketing.

The results of this research can help hospitals to design or improve digital marketing strategies. Several recommendations can help to improve the quality of hospital services, providing up-to-date information about the products, processes, and programs offered. However, this research has limitations. The number of respondents, which was only ten in the Empathize stage, could be increased in future research. The location of the interview in the hospital might make some respondents feel uncomfortable staying there for long. Future research can choose another location (perhaps outside the hospital) so that respondents feel more comfortable during the interview process.

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