

CHAPTER III

DESIGN METHODOLOGY

3.1 Subject of Design

The subject of this design is determined by the data gathered from literature review and relevant researches. Defining the subject is done for the purpose of establishing and narrowing a focus for the design process. The subject of the design is divided into two categories, a primary subject and a secondary subject, each described by the segmentation of demographic, geographic, and psychographic.

The primary target audience for the design is as follows:

1. Demographic segmentation:
 - a. Gender: Male and female
 - b. Age: 6 to 9 years old
 - c. Education: elementary school
 - d. Economy: SES B – SES A
 - e. Language: Indonesian
2. Geographic segmentation: Jabodetabek area (Jakarta, Bogor, Depok, Tangerang, Bekasi)
3. Psychographic segmentation:
 - a. Owns a pet dog or dogs but not active in the care activity.
 - b. Has an interest in reading, illustration, and interactivity.

The primary demographic of this design subject are children aged 6 to 9 years old, female and male, and within SES B to SES A. This group of audience is generally studying in elementary school at 1st to 4th grade. The economic segmentation is determined based on data on pet ownership related to financial. Pet owners, such as dog owners, are expected to spend high costs every year due to the pet's needs (McWhinney, 2023). The geographic segmentation being located in

Jabodetabek is based on data from Statistics Indonesia (2024) showing the Jakarta metropolitan area as the densest in the country. This design is made with the purpose of becoming an educational medium for children in their early development years.

The secondary target audience for the design is as follows:

1. Demographic segmentation:
 - a. Gender: Male and female
 - b. Age: 30 to 40 years old
 - c. Education: College or higher
 - d. Economy: SES B – SES A
 - e. Language: Indonesian
2. Geographic segmentation: Jabodetabek area (Jakarta, Bogor, Depok, Tangerang, Bekasi)
3. Psychographic segmentation:
 - a. Involved in child's activities, hobbies, and education.
 - b. Concerned with well-being of both child and pet dog.

The secondary demographic of this design subject are adults with a wider range of age, from 30 to 40 years old, female and male, and within SES B to SES A. The secondary target is specifically the parents of the children within the primary target audience. Parents' involvement with the education process of their children are important, as it encourages better learning out-comes and academic achievement (Berthelsen & Walker, 2008, p. 34)

3.2 Method and Procedure of Design

The design methodology used by the author for designing informational media about dog care for children will refer to the design method based on the Human-Centered Design theory taken from the book *The Field Guide to Human-Centered Design* by IDEO (2015). Designing using human-centered design was

chosen as a creative approach to compiling innovative informational media that is in accordance with the needs of its users. The human-centered design method is divided into three phases, known as the inspiration, ideation, and implementation phases.

3.2.1 *Inspiration Phase*

The *Inspiration* phase is the stage where the author carries out the process to get to know the design project better before entering the design stage. This section of the design process is used to conduct research on problems and gather inspiration, in which the author will conduct observations of media related to pet care and educational media for early childhood as a source of inspiration and reference. During the Inspiration Phase, data related to the content of informational media and target markets will be collected through established research methods, namely hybrid qualitatively and quantitatively.

3.2.2 *Ideation Phase*

The second stage in the design methodology is the *Ideation* phase. In the ideation phase, all data received in the inspiration phase will be processed into design opportunities. The author will refer to the data collected from the previous stage to compile big ideas, mood boards, and concepts when designing informational media during this stage. After compiling the concept for informational media, the author compiles the elements that will be used for the informational media such as color palette, typeface, and key visuals.

3.2.3 *Implementation Phase*

The next stage is the *Implementation* phase where the author applies solutions based on data and design results from the inspiration and ideation

stages. The work that has been designed in the ideation phase will be made into a prototype and submitted to the target audience to receive responses to the work. With the prototyping or beta testing stage, the author will collect criticism, suggestions, and feedback to make revisions to the design of the informational media. Throughout the implementation phase, the author will continue to receive input to produce the best design.

3.3 Design Technique and Procedure

The method for gathering data for this research is qualitative research. The qualitative research process typically uses a cyclical process as opposed to a linear process. Qualitative research begins by selecting a research project followed by asking questions relating to the research project, the data that has been collected is later organized and analysed to form a conclusion. Depending on the scope and depth required from the research, the process would be repeated several times by the researcher until the gathered data forms a satisfactory conclusion (Hardani et al., 2020, p 25-26). Data collection and analysis take place simultaneously in qualitative research, and is open to the possibility of redesigning.

Qualitative research is chosen as the method of research due partly to the specific target audience the design is aimed towards. After testing and observing several data collection methods, the author has found that quantitative or a combination of quantitative and qualitative is not effective in gathering data for the research project. The research techniques and procedures used for this project are expert interviews, focus group discussion, observation, existing studies, and reference studies. As determined, the research techniques conducted here are within the scope of qualitative research. The research techniques serve a purpose to provide in-depth insight and understanding to three aspects of the researched project, which are the topic of dog care, the intended audience of children and their parents, as well as the visual media of interactive books.

3.3.1 Observation

Observation is the process of systematic surveillance and recording towards aspects of the research subject and relies on the researcher's memory and observation skills. Observation is done either participatory or non-participatory, in which in participatory observation the observer would directly participate with the activities of the research subject, whereas in non-participatory observation, the observer does not involve themselves in any role towards the research subject (Hardani et al., 2020, p. 123-125). For this research method, both participatory and non-participatory observation will be utilized.

The first part of the observation is done at local bookshops, namely Periplus Summarecon Mall Serpong and Gramedia Summarecon Mall Serpong at Kabupaten Tangerang, Banten using the participatory observation technique. The author will be actively participating in the environment, browsing for available products as well as inquiring the staff at the establishment. The observation is done at the locations on March 2nd 2025, with Periplus Bookshop being visited at 11 AM and Gramedia being visited at 12 PM. Gramedia and Periplus are chosen as observation subjects due to it being prominent bookstores in the Jabodetabek area and fits the criteria for the target market segmentation. The purpose of the observation is to determine if there are any readily available products with a topic that is the same or is similar to the current research project, which is interactive books about taking care of dogs aimed at children. Additionally, should there be a similar product, determine the similarities and differences. During observation, the author will also analyze existing products of a similar premise and target audience to be taken as reference for the design project.

The second part of the observation will be done through online browsing, mainly through popular e-commerce platforms on March 3rd 2025. The author will not be participating in any transaction but rather survey the available products on each platform. The purpose of the observation is the same as the participatory observation, which is to discover if any books or media of a similar premise is available and the gathered insight as reference for the research project.

3.3.2 Interview

An interview is a session of verbal questions and answers directly between two or more people that serves a specific purpose. The conversation is conducted between two sides, one of which is the interviewer who asks the questions and the interviewee who would then provide answers and information to said questions. Interviews are useful for several objectives, which are obtaining first-hand or primary data, complementing other data collection techniques that are used for the research, as well as testing the results of other gathered data (Hardani et al., 2020, p. 137-139).

In this research project, expert interview is used to gather two aspects that are crucial for the research and design project. The first aspect is insight regarding dog care and ownership, specifically towards children. The second aspect is insight regarding the process of writing, creating, and publishing an interactive book targeted for children. The interview will be used to gather an in-depth insight regarding the expert's respective knowledge, opinions, and experience. The gathered data will be used to build a more focused research and design process.

1. Expert Interview with Veterinarian

The first interview is conducted with a veterinarian in order to gather data regarding the aspect relating to dog ownership and care from an expert of the field. The interview is conducted towards Drh. Yoga Renanda, a practicing veterinarian at Laras Satwa Boulevard Animal Clinic. The interview with a veterinarian has three main objectives. The first is to discover the benefits of taking care of dogs, specifically for children, according to an expert of the field. The second is to discover ways for children to take care of dogs in an appropriate way. Third is to discover what should and should not be done by children learning to take care of dogs. The interview also aims to gather insight regarding an expert's experience in their work field, on whether they seen cases relating to the topic and to what extent. The interview is done in-person at Laras Satwa Boulevard Animal Clinic. In order to adjust to the interviewee as well as the subject design, the interview will be done in Indonesian Language with the questions having been translated into English. As the interview is conducted in-person, the interview is documented through pictures as well as audio recording. The questions used for the interview are as listed below:

1. Introduction of the interviewee (name, position, experience).
2. What are the benefits of owning a pet dog for a child and their family?
3. Doctor, is it important for children to learn from an early age how to properly care for dogs? Please elaborate on the reasons as well as the level of importance.
4. According to doctor, how often do you see children who are actively involved in caring for their dog?

5. If rarely, why do you think that is the case?
6. Follow up question: If often (or in cases where the child is active) what roles do the child usually take?
7. Follow up question: What roles would you say children lack in caring for dogs?
8. What are the impacts if children do not care for or are indifferent to their pet dogs? (Explain the impacts on the children, the dog, and the family)
9. Have you ever seen or heard of cases where children do not treat their pet dogs properly? If so, how often and please elaborate on those cases.
10. What challenges might a child face in owning a dog and how should they respond to it?
11. What activities can children do to become more active in caring for dogs?
12. What kind of visual media do you think is appropriate as an educational tool for children about dog care?

Through this interview, the author plans to obtain valuable insight regarding dog care for children to be used as a source of information and reference data in the design process.

2. Expert Interview with Children's Book Writer

The first interview is conducted with a children's book writer in order to gather data regarding the aspect relating to creating an educational interactive book for children. The expert interview is

conducted with lecturer and children's books writer Heru Kurniawan. He is currently a lecturer at Universitas Islam Negeri (UIN) Prof. K. H. Saifuddin Zuhri Purwokerto, as well as an author who has published over 30 books aimed at children. His works include activity books, where children can directly engage with the book in the learning process. Those activities include drawing, tracing, and connect-the-dots elements to teach children basic language and math skills, accompanied by illustrations to make each page more appealing. This was one of the reasons the author has chosen Heru Kurniawan to interview as an expert, as his work aligns with the project's goal of creating an educative book that its readers are able to interact with.

For this interview, the author aims to strengthen the gathered data on books, specifically children's books, including how to create and design them, as well as gathering the opinions and experiences of an expert in the publishing industry. The interview is done online through the platform Google Meet. In order to adjust to the interviewee as well as the subject design, the interview will be done in Indonesian Language with the questions having been translated into English. As the interview is conducted online, the interview is documented through screenshot as well as audio recording. The questions used for the interview are as listed below:

1. Please introduce yourself (career, experience, and why chose to become a writer).
2. Why did you choose to write books for children?
3. What age are your books aimed at?

4. What are the benefits of activity and interactive informational media for children?
5. What is most important when designing educational books for children and what should be avoided?
6. What art style do you think is most suitable to use when designing educational media for children?
7. In this modern digital era, according to you, why is it still important for children to read books?
8. In your opinion, how do you make an educational book that will attract the attention of children today?
9. According to you, is the age that your books are aimed at the right age to start being independent and learning to be responsible, for example in caring for pets?
10. According to you, can interactive book media be an effective educational tool to teach children how to care for pet dogs? Why?
11. Have you ever seen a book on the topic of dog care that was geared toward children? If so, what?

Through this interview, the author plans to obtain valuable insight regarding the process of designing educational interactive books for children to be used as a source of information and reference data in the design process.

3. Interview with Parent and Pet Owner

The third interview will be conducted with an adult individual who fits both the criteria of parent to a young child as well as an owner

of a pet. The purpose of this interview is to gather insight regarding the parent's point of view of the relationship between their child and their dog. This interview will be conducted with Dayu Hatmanti, the mother of a young daughter and owner of a pet cat. Dayu is chosen as an interviewee due to her unique position and experience, as her daughter has taken full commitment and responsibilities of taking care of the stray cat that she had found. Through this interview, the author aims to gather data from a household who has successfully strengthen the relationship between child and pet. The questions used for the interview are as listed below:

1. Please introduce yourself (name, background, etc.).
2. How did your daughter meet your cat? Please retell the history of their relationship.
3. How does your child take care of the cat? Please elaborate in detail her daily routine and responsibilities.
4. Why did you decide to trust your child with the responsibility of taking care of a pet on their own?
5. At what point did you fully realize your child is capable of handling the responsibility of taking care of her pet? What makes their relationship special to you?
6. What were the largest challenges that your child faced in taking care of her cat? How did she learn and improve?
7. To what extent is your involvement in taking care of the cat alongside your child?
8. What media or platform did your child use to gather information on how to take care of a pet?
9. What positive developments did you see in your child as a result of actively taking care of your cat? Are there any negative impacts?

10. What reasons do you think other children and parents may refrain from giving the child a more active role in caring for their pets? How can it be alleviated?
11. Do you believe children at your child's age are ready to take on the responsibility of taking care of their pets?
12. Do you think other families with children and pets could benefit from learning from your approach?

Through this interview, the author plans to obtain valuable insight regarding the parent's point of view as well as the child's experiences to be used as a source of information and reference data in the design process.

4. Interview with Children with Pet Dogs

The fourth type of interview will be done towards the target audience itself, which are children aged 6 to 9 years old who own pet dogs. The purpose of this interview is to gather insight from children who lives with their dogs, how they act around their dogs, and what responsibilities they take at home, if any. The insight provided by the interview is meant to understand what is needed in the design project to create a final product that is relevant for its intended audience.

This interview will be conducted with several children to provide a wide sample of the general experience of the target market. The interviewees are Harold (age 8), El James (aged 9), and Nona (aged 9) who are all children within the intended age range who have or used to own dogs. The questions of the interview are as written below.

1. Please state your name, how old you are, and since when have you had a pet dog at home.
2. How do you feel about having a pet dog?

3. Do you like helping your parents take care of your dog? For example, feeding/watering, walking, bathing, and taking it to the vet?
4. If you rarely take care of your dog, why? What is the reason?
5. Currently, what visual style do you like the most? Can you give examples, such as movies, series, or books whose pictures you like.

Through this interview, the author plans to obtain valuable insight directly from the target market's point of view and opinions to be used as a source of information and reference data in the design process.

3.3.3 Focus Group Discussion

A focus group discussion is typically used as a qualitative research method to gather a deeper understanding of social issues by obtaining data from a specifically selected group of individuals rather than from a broader population sample (Ochieng et al., 2018, p. 1). The first step is to determine the objective, purpose, and key questions. Afterwards, the participants needed must be identified and recruited, ranging from 4 to 15 individuals as well as determining a suitable location (Ochieng et al., 2018, p. 22).

The focus group discussion is conducted with six participants including the author. Each of the selected participant is aged 20 to 22 and has or had pet dogs in their early childhood years. The objective of the focus group discussion is to gather data on children's experience on owning and growing up with pet dogs, how they behave, their role in the ownership, as well as other factors such as parental involvement to gather insight on what is needed for the design. The interview will be done in a combination of Indonesian Language and English, with the questions having been translated into English. As the interview is conducted online, the interview is documented through screenshots as well as

audio recording. The questions used for the focus group discussion are as listed below:

1. Please introduce yourself (name, age, when you first got a dog, and why you adopted).
2. As a child, how often did you participate in caring for your dog? If often, what was your motivation? If rarely, why?
3. As a child, did you enjoy participating in caring for your dog or did you see it as a hassle? Please elaborate on why.
4. Have you ever hurt your pet dog or treated it badly due to lack of knowledge, either intentionally or unintentionally?
5. Have you ever thrown away or given your pet dog to someone else? If so, what was the reason? (If not, have you ever heard of such a case?)
6. What did you do most and least often as a child when participating in caring for your dog?
7. What do you know about the benefits of keeping dogs for children?
8. When you were a child, where did you learn how to care for dogs? Did you learn actively, rarely, or not at all?
9. In your opinion, what kind of visual media is suitable as an educational tool?
10. If there was informational media about dog care (which could make you interested in keeping a dog) when you were a child, would you have wanted to read it?

Through this interview, the author plans to obtain valuable insight regarding the experiences of children who grew up owning dogs to be used as a source of information and reference data in the design process.

3.3.4 Existing Studies

The research method of existing studies is used by reviewing currently existing media that are relevant to the design topic. The method is done by paying close attention to certain aspects of the existing media such as the overall concept, content, and problems. Through existing studies, the author aims to understand a broader context of educational media regarding dog care aimed towards children and analyze how an interactive book can be designed to be a useful source of information for the target audience. By conducting existing study, the author can receive insight that will become a solid foundation for the design.

Using this research method, a number of existing media with content similar to the research topic will be chosen to be closely analyzed and evaluated. The chosen media will have content relating to dogs and children, as well as whether there are specific strategies and approaches taken when publishing educational books. The existing study also functions to find weaknesses and strengths in existing works, allowing the author to take into consideration those flaws throughout the design process.

3.3.5 Reference Studies

Reference studies will be conducted as a research method to find existing media that can be used as reference for the design techniques that are planned to be utilized in the design process. In this research method, several existing media, specifically children's books, will be chosen based on whether its visual design and style is relevant to the research topic. The existing works will be analyzed and evaluated, in particular it's visual design, art style, and aesthetics with the goal of reaching a deeper understanding of current visual trends, specifically aimed at children. The

reference studies are also conducted find weaknesses and strengths in existing works so the current design process can aim to improve on known flaws.



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