

E-dopt: A Mobile Application for Pet Adoption in Indonesia

Santy*, Ryan Karuna, Alvin Budiman

Information Systems Department, School of Information Systems,
Bina Nusantara University, Jl. KH. Syahdan No. 9, Jakarta, 11480, +62 21 5345830, Indonesia

*Corresponding author, e-mail: santy@binus.edu

Abstract

In this research, we discuss the current trend on pet adoption in Indonesia and introduce a mobile application called e-dopt to encourage more pet adoption in Indonesia. Pet adoption mobile application is not yet popular in Indonesia, thus the benefit of conducting this research. Within this research, a mobile application to help the pet adoption process has been developed. The mobile application is developed on Android platform and the requirements are gathered by interviews, surveys, and research that have been conducted. The mobile application developed provides convenience for those who wants to adopt or give out pets and also allows businesses in pet product industry to use the mobile application as a sales channel.

Keywords: pet adoption, mobile application, e-dopt, animal adoption, pet e-dopt

Copyright © 2018 Universitas Ahmad Dahlan. All rights reserved.

1. Introduction

There are a lot of stray animals, particularly dogs, because various reasons, one of them is the owner have gotten bored with their dogs [1]. The commonly heard reasons why owners neglected or surrender their pets are: bored, no time to take care, moving to another city or abroad, recently have a baby, issues with the dog's barking, dislike from member of family, etc. [2]. In 2016 alone the government secured 500 stray animals in Jakarta and give them up or adoption. As the number of strayed animals increases and cruelty worsens, some animal welfare rescuers are more challenged than ever [3]. Most of the times, if within 2 weeks the dogs are not yet adopted, they would be put down and there is information linking the number of pet acquisition or adoption with number of euthanasia [4]. In an attempt to keep so many dogs from being euthanized, pet adoption has been promoted, but with limited success [5].

Organizations that are willing to take in stray animals do exist, but these organizations commonly have been having issue with lack of space and funding. Because of the increasingly large numbers of homeless animals, animal shelters are often stretched on resources and are only able to provide basic necessities for the animals. [6] There were efforts to reduce the number of the stray animals like the set up of organizations that take in and take care of stray animals. Individuals may then adopt any of the stray animals. Even so, organization that help stray animals found themselves to be unable to take in all the strays due to its number and people's unwillingness to adopt strays as pets. Shelters and rescue groups ask a lot of question to prospective adopters for two main reason [7]:

- a. To ensure long-term homes for the animals in their care
- b. To facilitate good matches between customer and their adopted companions.

Most shelters require adopters to complete an application. In addition to basic contact information, the application is likely to include questions about the following areas:

- a. Housing situation (renting vs owning)
- b. Number and ages of any children in household
- c. Number and type of other pets that adopter own
- d. Adopter experience with pets

Studies show that people consider adopting more often than they actually do, and this indicates a potential market should there is a way that can make shelter animals more visible to potential adopters [8]. According to previous research, adopters have made a decision to adopt prior to interacting with a dog [9] In era where everyone using smartphone, a mobile application

is convenient for people who like to adopt a pet. Some developer, like Petfinder [10] which is popular as pet adopt finder in America, has built a mobile version of the website to make it easier for people to find a pet along with extensive information resources on pets. There is also application AllPaws from Dlc ventures that also based on America [10]. AllPaws features over 200,000 dogs and cats available for adoption. It also has a Pet of the Day notification, allowing people to share photos and description on social media so people can learn about benefits of adoption. In Indonesia, there is only one application that currently available for online pet adoption, which is Adopsi [11]. Adopsi's service location coverage varies from Jakarta, Surabaya, and mostly Jogjakarta. The organization rely on crowdsourcing to develop the application, thus the features are still very limited and the sustainability of the organization is highly challenged [12].

In Indonesia, pet adoption application is not popular. Hence, we conducted a research on how a mobile application can help to increase pet adoption number and design an application that could help users to adopt strays not only from organization that takes in strays but also from other users that put up their pets up for adoption. Sustainability of the organization maintaining the mobile application is also one of the main concern considered in this research.

2. Research Method

The research is conducted by collecting data from online questionnaire, which are distributed to around 90 respondents of general population. The questionnaire is divided into four sections: 3 general question, 14 adoption question, 6 pet general question, and 6 application question. Questionnaire contain questions that will give insight on the respondent's experience with pets, ability at taking care of pets, preference of animal as pet, their awareness of shelter and stray animals, and how many (if any) pets have they owned until now and whether an application will help to encourage them to adopt stray animals. The data gathered will be analyzed and used in the design step. The mobile application is developed on android platform.

3. Results and Discussion

Based from the survey, 57.3% of people who takes the questionnaire is 21-23 years old, 21.3% of the respondents is from 18-20 years old and 15.7% of the respondents is from 24-26 years old. Based from this three-highest portion, most of them are college student (57.3%). 80.9% of the respondent have a pet with while rest of them doesn't have pets. From the 80.9%, the top two animals owned are cat (62.5%) and dog 32.5%.

When the respondents were asked on whether they would to give up their pet for free to be adopted by other people, 25 out of 73 respondents don't want to give their pet to be adopted for free but the rest of respondents are willing to give up their pet for free. 58% of the respondents never adopt an animal as pet and only 18% respondents know that they can adopt others people pet. While as high as 70.6% of respondents refused to adopt other people pet. It means that adoption culture is still not strong enough in Indonesia and there is a potential for growth should the society is more educated about pet adoption.

Top three concerns that pet owners are facing while taking care of their pets are health care (63%), housing (47,2%), and diet (22,2%). This data show business opportunity that can be fulfilled by local business owners by using the mobile application developed as a sales channel. Based on Figure 1, it shows that only a small portion of pet owners know how to treat pets well. Hence, information regarding on how to take care pets is highly needed.

For application, 90% of the respondents has never used application to adopt an animal. Only 3% of respondents mentioned social media as place to look for pet to adopt. The respondent mentioned Facebook as the social media to look for pet adoption because of the share feature is quite helpful. 74% of respondents shows interest in using application to adopt animal. From Figure 2, it shows that our application will have better chance in attracting new people because of high interest. While the rest who is not interested to adopt animals using this application said that they are not ready to take care a pet, don't want a pet, or just don't want to. From the respondents who are interested with the e-dopt application said they are interested because and they sympathize with the strayed animals.

What condition was the animal in when you adopt it?

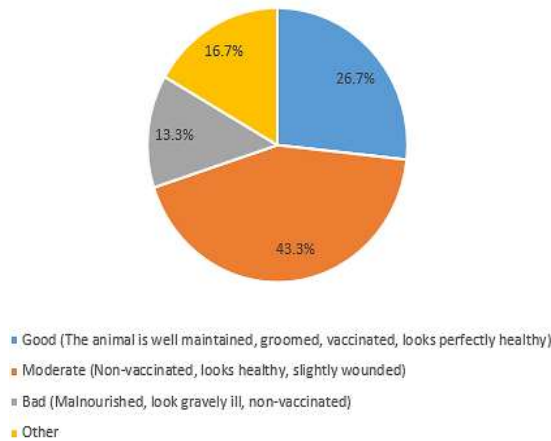


Figure 1. Pet owning distribution

Are you interested in adopting animals using application?

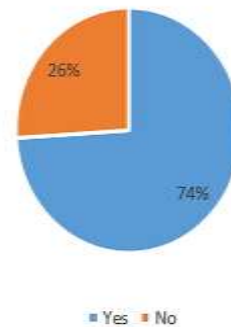


Figure 2. Respondents interest in adopting animal using application

From the respondents, 39,7% says that using mobile application to aid pet adoption is practical while 46,6% says that using mobile application to aid pet adoption is flexible. This assert that the e-dopt application is well perceived to facilitate the pet adoption. Figure 3 is the main screen interface for the mobile application for online pet adoption. After pet adopter and pet giver log in, they will see list of pet that has been already posted by another pet giver. Pet adopter can click the pet picture to see the details. At top left there is button that will lead to menu navigation. The top right side is profile picture. If pet adopter and pet giver click it, it will lead to their detailed profile. There is search feature that will benefit the users should they want to search something spesific such as product or pet name.

Based on Figure 3, the sidebar consists of E-dopt application features such as products menu to shop and notification to check any new information comes from admin or other users. Pet givers can register their pets that ready to be adopted by other people. Pets giver need to fill necessary information to attract pet adopter like pet name, pet breed, pet age, pet image, location, pet type, vaccine and sterile status with detail, and also pet description, such as shown in Figure 4.

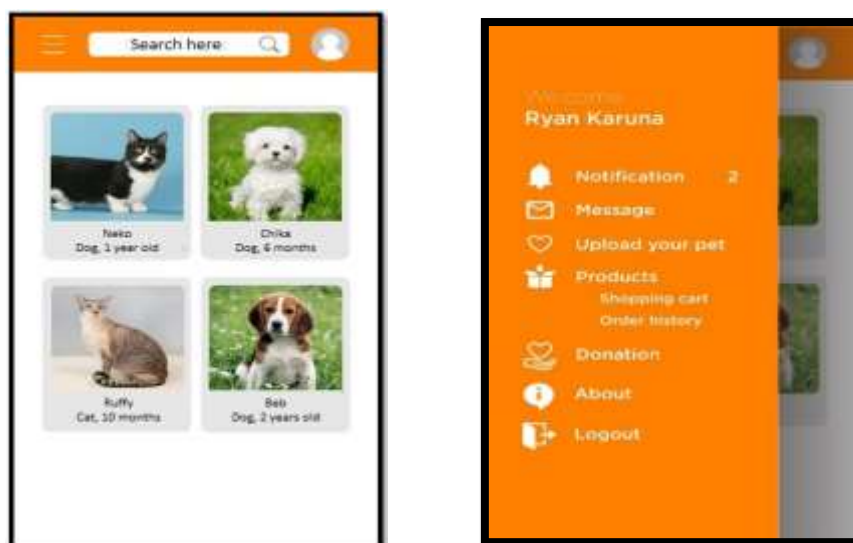


Figure 3. Main screen interface

When the pet adopter want to see the detail of the pets, they can see the details such as of vaccine status and sterile status with details, owner, pet name, location, pet description, pet breed, the image of the pet, age of the pet, animal type, and pet status wether its already adopted or still available. As shown in Figure 4, pet adopter who are interested to adopt the pet can click "Adopt!" to proceed to the adoption form or message to the owner if they are still not sure about the pet or want to know more about the pet.

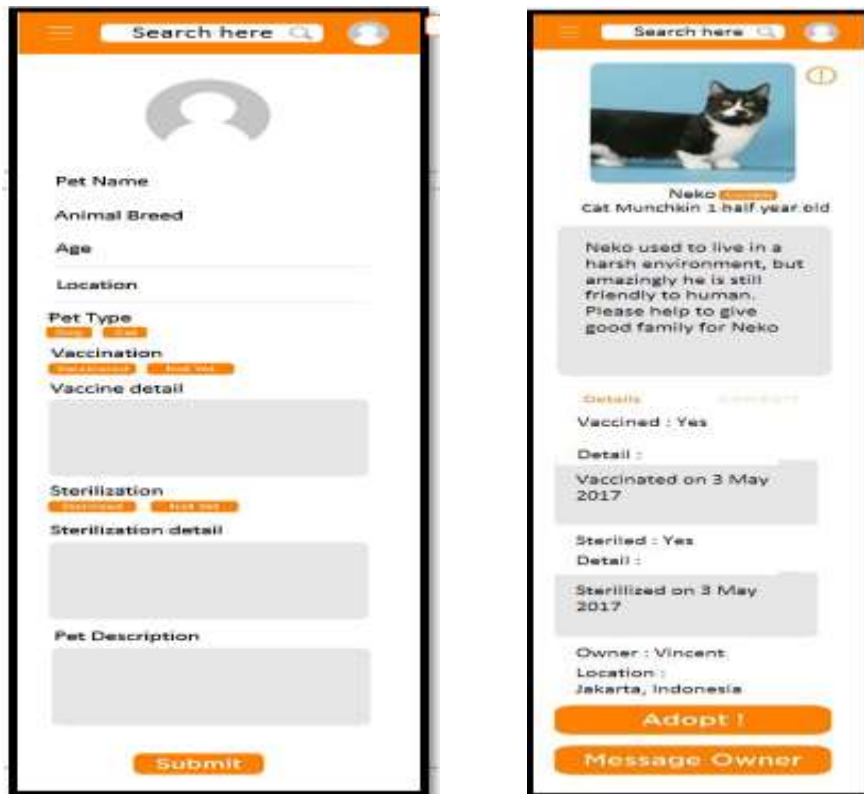


Figure 4. Upload pet and view pet interface

As shown in Figure 5, pet adopter can also leave comment in the pet details to express their thought in public like interest or question about the pet. Pet adopters can click adopt button to proceed to adoption form. In adoption form, the pet adopter need to fill necessary information to the current owner like name, phone number, e-mail, address, job, status, home condition, and reason to adopt.

As shown in Figure 6, when pet adopter and pet giver click the profile picture, it will lead to figure above. It will show the details of their information such as E-mail, username, phone, address, posted pet, and applied pet if they ever submit adoption form or posting a pet. Pet giver can also edit their information about their pet if there is something wrong with it by clicking the gear icon. When the pet giver click the form icon, it will show adoption form detail that already been fill by the pet adopter. When pet giver feels suitable with the pet adopter, pet owner can click the accept button to approve their adoption form or add product. We provide this shop feature to help with the financial sustainability of the organization.

After pet owner accept one of many adoption application forms, the other forms' status besides the approved one will change into denied status. If the pet giver does a mistake in accepting form, they can click exclamation mark button to report the form to the admins. As shown on Figure 7, users can also comment on the products by leaving a testimony or question regarding the product. After confirming the products and delivery form, users will need to give a final confirmation of all the information. Vendor that already login will be show by their list product,

as shown in Figure 8. Vendor can manage the product in this page like edit, delete, or add product. We provide this shop feature to help with the financial sustainability of the organization.

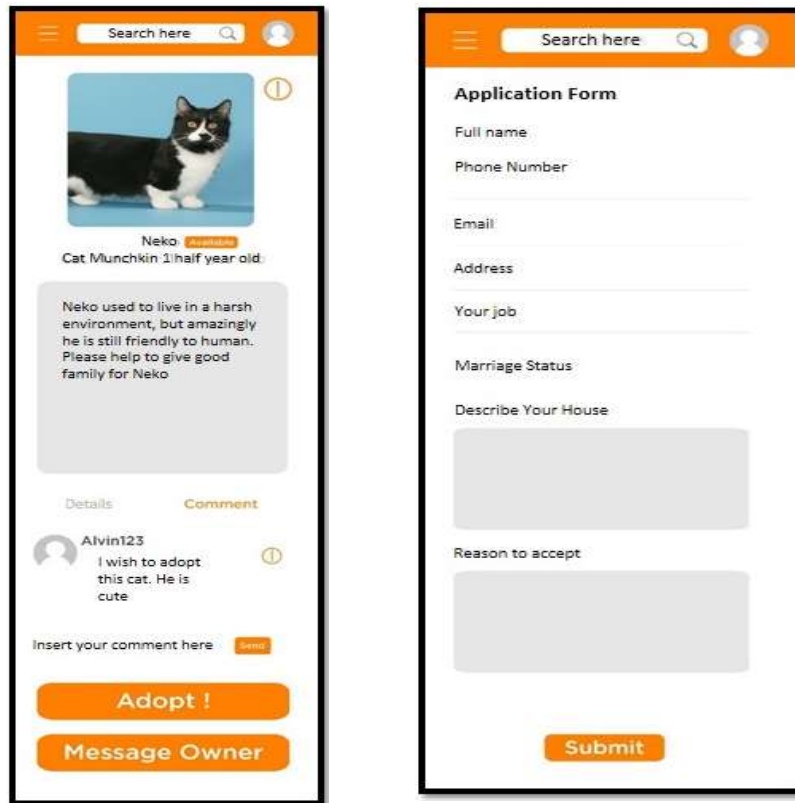


Figure 5. Pet comment and Application Form interface

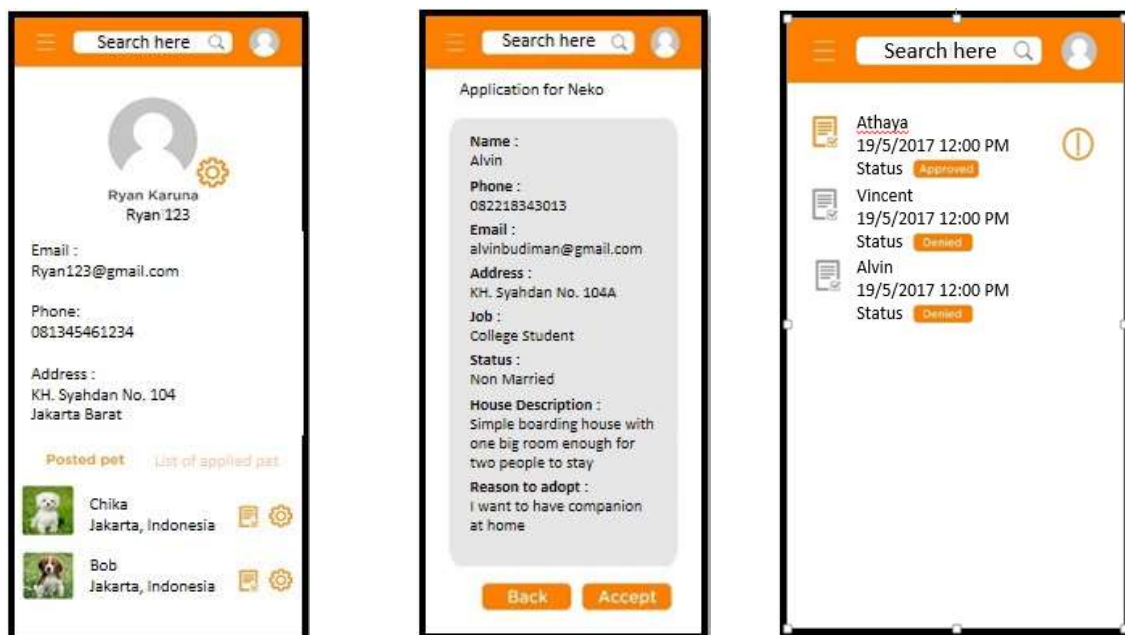


Figure 6. Profile detail with posted pet adoption form interface

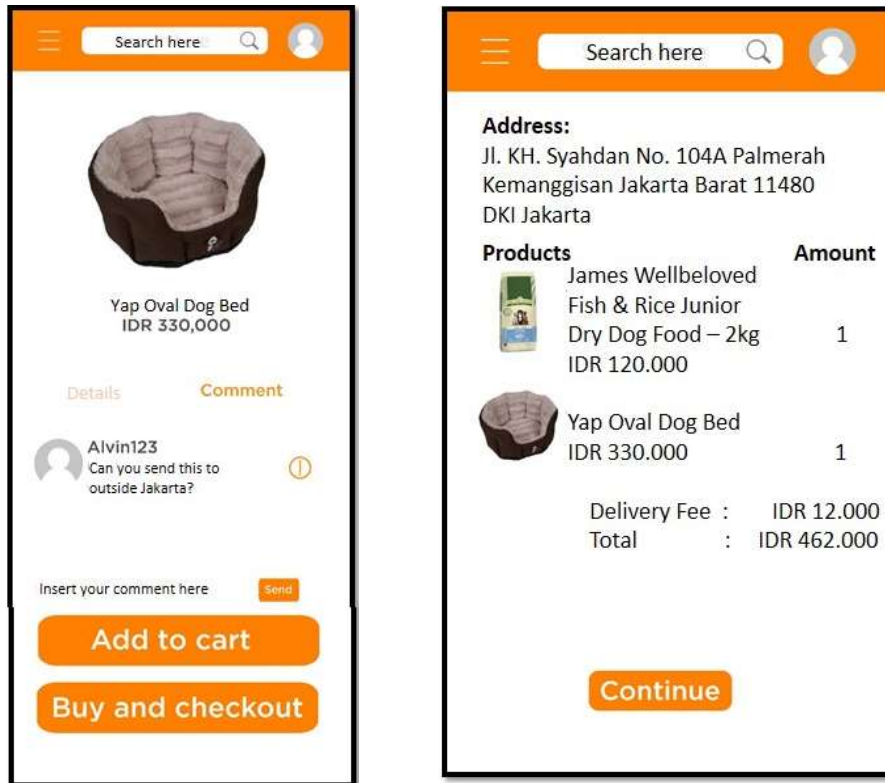


Figure 7. Product and Order interface

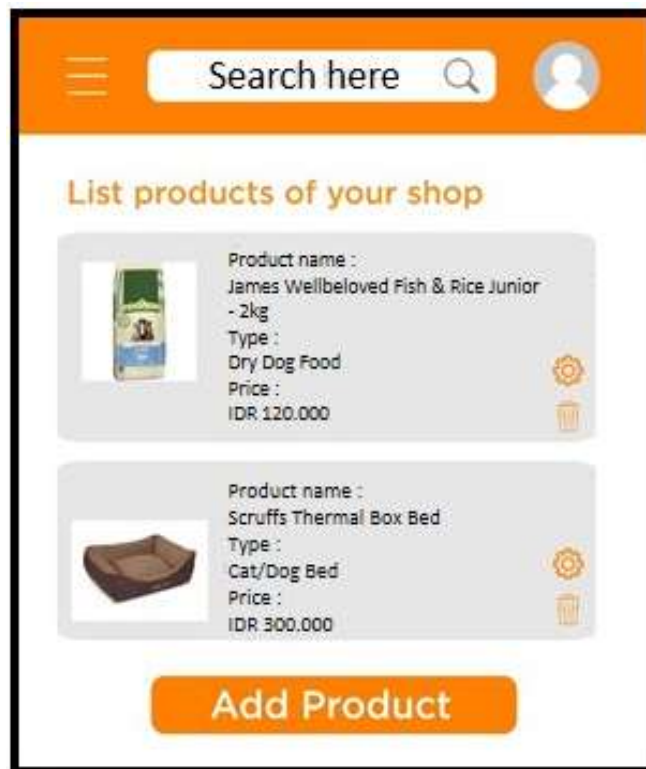


Figure 8. Vendor product list interface

4. Conclusion

E-dopt is a mobile application that acts as a platform for people to adopt or give out pets. It provides convenience for those who wants to adopt or give out pets. E-dopt also allows businesses in pet product industry to use E-dopt as a sales channel. E-dopt may indirectly help decrease the number of stray animals on the city street or at least prevent those animals becoming strays in the first place. One of the main issues that E-dopt may face is that it is very likely that it will not be able to compete with other already large social medias. However, E-dopt may try to differentiate it with other social media by having it themed around pet adoption or pet product sales channel.

References

- [1] Animal Defenders. 2017. Retrieved from Berita Satu : <http://www.beritasatu.com/destinasi/155725-animal-defenders-terus-berkomitmen-menyelamatkan-hewan-terlantar.html>
- [2] Data dari Let's Adopt! Indonesia. 2017. Retrieved from : <http://repository.unika.ac.id/2046/7/09.13.0003%20Jane%20Patricia%20DAFTAR%20PUSTAKA.pdf>
- [3] How to Help A Stray Pet. 2017. Retrieved from Now Jakarta :<http://nowjakarta.co.id/how-to-help-a-stray-pet>
- [4] A.Arbe, et al. Relationship between sources of pet acquisition and euthanasia of cats and dogs in an animal shelter: a pilot study. 2017. Australian Veterinary Journal Vol. 95 No. 6, June 2017
- [5] L. Curb, et al. The Relationship between Personality Match and Pet Satisfaction among Dog Owners. 2013. Anthrozoos Volume 26, Issue 3 pp. 395-404. Research Gate.
- [6] A, Protopopova, et al. The effects of social training and other factors on adoption success of shelter dogs. 2012. Applied Animal Behaviour Science 142 pp. 61-68. Elsevier.
- [7] The Adoption Process: What to Expect. 2017. Retrieved from The Humane Society of The United States: http://www.humanesociety.org/issues/adopt/tips/adoption_process_what_expect.html
- [8] H Mohan-Gibbons, et al. Evaluation of a Novel Dog Adoption Program in Two US Communities. 2014. PLoS ONE 9(3): e91959.
- [9] A.Protopopova & C. Wynne, Adopter-dog interactions at the shelter: Behavioral and contextual predictors of adoption. 2014. Applied Animal Behaviour Science. Elsevier
- [10] M Lansdowne. 2015. Apps That Help Adoptable Animals Find Forever Homes. Retrieved from Onegreenplanet:<http://www.onegreenplanet.org/animalsandnature/apps-that-help-adoptable-animals-find-forever-homes/>
- [11] Adopsi. 2017. Retrieved from Adopsi : <http://adopsi.org/>
- [12] Ayo Adopsi Hewan Terlantar: Bangun Aplikasi ADOPSI. 2017. Retrieved from Kitabisa.com: <https://kitabisa.com/adopsiapp>