ABSTRACT

In this era of rapidly growing technology, the demand for health apps in Indonesia continues to increase, but the adoption or acceptance of health apps still faces challenges. This study was conducted with the aim to classify the acceptance of health apps based on social aspects. To achieve this goal, the analysis was conducted using the Convolutional Neural Network (CNN) algorithm by using two predetermined scenarios that vary the data sharing ratio, with the first scenario using a 70:30 ratio and the second scenario using an 80:20 ratio. By applying these two scenarios to the CNN model that has been developed, the highest accuracy results are obtained in the use of the 80:20 ratio with an average overall accuracy of 78,13%. Based on the results by paying attention to each aspect, the most influential aspects in influencing user decisions to use health applications are social influence and social community which produce the highest accuracy among other aspects. The social influence aspect is also an aspect that gets a lot of positive answers from users. In addition to these two aspects, the aspect of recommendation by professionals and the aspect of support from health organizations are also quite influential on the acceptance of health applications among users. Recommendations from healthcare workers and companies that encourage to use health applications also have an important role in the acceptance of health applications.

Keywords— health applications, applications adoption factors, social aspects, convolutional neural network (CNN)