

gain market shares and profitability. Thus, the farmer can maximize the production rates, profitability, and efficiency with less human interface and operating costs. Also, animal welfare will be enhanced as an indirect result of automation.

As future working, the mobile application may be re-developed to operate fans, lights, and motors without any hesitation. Also, it is planning to be modified to operate in both android and IOS operating systems. Further, most birds are usually suffering from bird flu which is identified by various surveys. Bird flu is a serious case that affects animal welfare and performance. And also, it will be affecting their metabolism and slow down the growth. Hence this will be harmful to the health of farmers as well as workers and neighbors. Thus, a health condition detection system can be implemented for early detection of bird flu and other health issues. As analyzed, it can be achieved by RFID and AI technologies as future work

Declarations

Study Limitations

The developed system was proposed to implement and test at an actual small-scale poultry house to check the accuracy and effectiveness. Unfortunately, it is unable to achieve as wished due to the current pandemic situation in the country. Thus, it's developed as a prototype system to give the conceptual idea of the proposed concept. Also, the developed mobile application is allowed to use in an android platform. Hence the above-highlighted limitations are figured out as the limitations of the artifact.

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Provide funding source, supporting grants with grant number. The name of funding agencies should be written in full. If no funding source exist, please write none. **Conflict of Interests**

Declare any potential conflict of interest exist in this publication.

Human and Animal Related Study

If the work involves the use of human/animal subjects, each manuscript should contain the following subheadings under the declarations section- **Ethical Approval**

Provide ethical approval authority with name with the reference number. If ethical approval is not required.

Informed Consent

Write a statement of informed consent taken from the participants to publish this research work. The editor may ask to upload scan copy if required.

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