Poultry BioSecurity and A.I. Solutions:

The rise of high-tech solutions that combine simplicity with lightning fast precision.

PreciseAG

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Overview

This whitepaper introduces the importance of early detection of infectious disease in poultry, and a highly advanced solution to mitigate risks. PreciseAG is a solution that focuses on the early detection of potential pathogens in livestock, using Artificial Intelligence and machine learning.

We will go through the main reasons why poultry biosafety is crucial to the industry, and why sustainable solutions are needed in the current times and environment.

Because Everyone Eats Chicken

For farms that raise chickens and other birds for poultry meat and byproducts like eggs or feathers, keeping the stock healthy is paramount. There are numerous potential challenges and hazards, and many can rapidly spread through a farm's stock if pathogens are not detected in time.

To protect both your business and the health of the public, a bigger focus on prevention and smarter ways of managing infectious diseases in your stock is needed.

"Contact us at PreciseAG.ai for leading edge Early Detection Solution"

Why We Need Poultry Health Management?

Chicken is consumed all over the world and is present in the daily diets of billions of people. We can even say that "everyone eats chicken," since it's such a staple in international cuisines and an affordable, versatile, and nutritious food. To put the popularity of chicken meat into numbers, there are 65 billion chickens consumed annually in the world.

The farming of poultry stock has to be done efficiently for the business, but the focus must be first and foremost on health management and biosecurity. No matter the size of the farm, the rapid succession of stock and the frequent high density of the flocks lead to a bigger possibility of the poultry being at risk.

Factors that lead to disease include pathogens that may or may not be contagious, lead to decreased production or cause disastrous losses and health hazards. Any farmer aims to minimize risk with the lowest intervention rate, preferably without spending huge amounts on biosecurity issues in their advanced stages.

We believe that prevention and early intervention are the best solutions for the future of poultry farming, and we use state-of-the-art technology to help farmers keep their stock in top shape and disease-free. Read on to discover our simple, yet game-changing A.I.-based solution.

Industry BioSecurity Trends and Challenges

In the poultry industry, the main challenges are linked to disease control and prevention, while keeping production costs to a reasonable level and securing the high quality of products that reach the public.

Poultry farms must comply with laws that regulate both animal welfare and public health security, and solutions adopted by producers have to fall under these strict standards. In the current state of events, it's crucial to find sustainable and effective ways of identifying potential threats, to prevent business losses and public health hazards.

The most common pathogens that lead to foodborne disease in the poultry industry are *Salmonella* serovars and *Campylobacter* bacteria. Both are easily transmittable within the poultry stock, and along the food-handling process. But other threats like rising cases of avian flu are calling for better prevention measures and more modern, sophisticated biosecurity solutions.

Human Bias

PreciseAG removes this initial hurdle by overcoming the need for reliance soley on human perspective.

Because of the numerous factors that contribute to a bird's ability to resist diseases, there will be an "acceptable" level of mortality (4% to 40 days for meat birds, 1% to 28 days for layers and breeders). To keep this level well below the acceptable limit involves close monitoring of the stock.


Globally, this is done by workers, but the human perception is susceptible to error, especially when large stocks are observed. Computer-based systems are unbeatable when it comes to speed and precision, and are able to observe the behavior, size, and aspect of the birds at critical points of operations.

PreciseAG A.I. Solution for Poultry BioSecurity

PreciseAG uses artificial intelligence to detect anomalies in the health status of poultry stocks, helping farmers identify disease symptoms early on. With early intervention, expensive measures like placing contaminated stock into quarantine are no longer needed or reduced to a significantly smaller scale.

We use a system that can be deployed anywhere, no matter the size of the farm, helping commercial producers, Animal Health professionals, and Government Agencies with early warning solutions. When animal infection is detected early on, contagion can be stopped and businesses are able to mitigate risks without collapsing. And, of course, public health management is stronger, more efficient, and quicker to react.
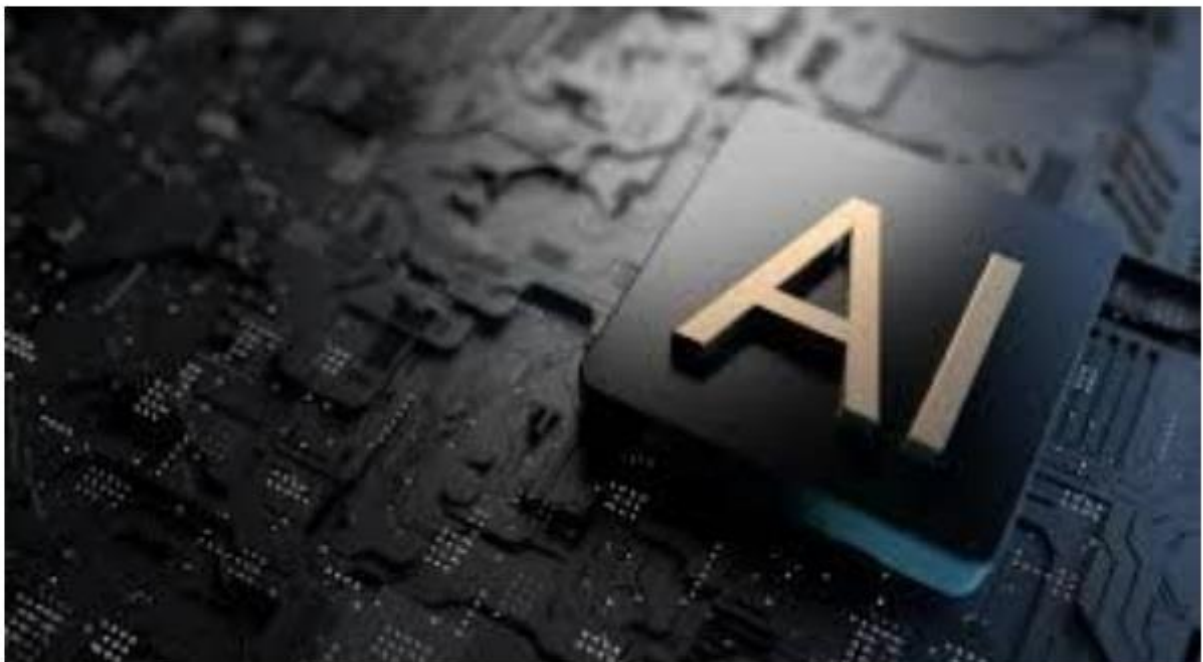
The solution deployed by PreciseAG is easy to implement and use, and incredibly efficient in conducting an initial assessment for signs of illness or potential biosecurity issues. The analysis generated by PreciseAG assist farmers closely monitor the health of their livestock and intervene before a disease reaches a late-stage and solutions have limited availability.

Sustainable poultry farming is no longer just an option for avantgarde businesses, but a priority across the whole industry. By giving an immediate diagnosis and being extremely easy to implement with no invasive procedures, PreciseAG contributes to a smarter way of farming and health monitoring.

Conclusion

Farmers, government agencies, and health inspectors must keep up with the advances in technology in order to lead the industry towards sustainable, yet highly productive operations. By using Artificial Intelligence and component technologies in the early diagnosis of poultry health threats, we help the industry evolve and produce more high-quality products in a highly controlled environment.

We replace more rudimentary early detection methods, which are mostly based on human perception, with the precision and processing speed of advanced computation. This way, we eliminate an overwhelming part of the bias we often observe when human perception is the determining element.

"Because Everyone Eats Chicken"

PreciseAG

PreciseAG is a globally tested solution, giving it the advantages of a simple implementation with powerful and accurate results.

Our solution is trusted to detect possible threats early facilitating those poultry farmers and regulating entities to do their job safely and efficiently.