WinVision AI Animal Health Solution

Improving Animal Welfare Standards with Cloud & AI
Animal diseases and their healthcare challenges are constantly evolving, yet their impact on the global economy, human health, and sustainable development remain undervalued.

The traditional process and solution to manage animal health in the Livestock industry are lengthy. A long gap between health evaluations is a significant challenge for the industry, resulting in health issues like bovine respiratory disease going unnoticed by several other disease outbreaks and deaths.

**Challenges Faced by the Farmers**

- Losing cattle/chicken in the farms
- Inability to tackle cattle/poultry at an individual level
- Lot of manual activities and cumbersome data interpretation process
- Cannot identify disease in its early stages. It’s too late by then. Too reactive today
- Cannot scale-up for demand vets/doctors is an issue

To help eliminate unnecessary livestock losses, improve the state of ethical meat production, and drive increased revenue for cow and poultry, Farmers can now leverage cloud data platforms, machine learning services, and advanced monitoring technology such as live camera feeds, fit bits, and CT scans.
WinVision AI Animal Health Solution

WinWire’s WinVision AI is a comprehensive, Azure-based Livestock Health Intelligence platform that brings together the best-of-breed Azure architecture supporting real-time, batch, interactive, and collaborative solutions in livestock health management.

The solution integrates data management of sensor feeds, Azure Cognitive Services, computer vision, and Machine Learning. The IoT-enabled solution uses sensors to gather data on the atmosphere like CO2 presence, feed and water consumption indications, and changes in animal locomotion. It also analyzes herd behavior to detect illness and deliver predictive analytics on animal health.

WinWire’s New IP & Vision AI Automated Process

- Bovine/Cows
- Poultry (chicken, etc.)
- Blob Storage
- AzCopy
- ADF
- Data Lake
- SQL
- SQL DB
- Mobile App
- Power BI Dashboards
- Training
- Review, Feedback, Retrain
- Cognitive Custom Vision
- ML Studio - Anomaly Detection
- RL Engine (personalizer)

The same process will be applied for necroscopy analysis of poultry to identify the diseases.
WinVision AI also offers a seamless integration from its existing IP solutions, including Knowledge Mining, WLInsights, and Vaccine Management, to extract valuable animal health information and improve health outcomes.

**Key Features**

- A cloud-based solution that provides real-time access to data insights anytime, anywhere leveraging Azure Data Services & Cognitive AI capabilities.

- Farm owners would be alerted to the health condition of the cattle beforehand to enable proactive actions like consulting the veterinarian or administering drugs etc.

- Elimination of manual process to go thru the videos, improve the accuracy of analysis and as well setup process for more frequent health monitoring.

- On-demand access to records of animals enables real-time health monitoring.

- Consolidate data about farm animals and analyze herd behavior to detect illness, manage nutrition, and improve breeding.

On-demand access to records of animals enables real-time health monitoring.
Value Proposition

We have enabled farmers to adapt Azure technologies for remote support and automation successfully from traditional methods with our three-pronged approach of:

• **Improves User Experience**
  Reduces farmer and vet burnout, technician overloads, and staffing requirements delay in sending people out to the field.

• **Reduces Cattle and Poultry Deaths**
  Significantly reduces animal deaths and disease spread impacting humans, resulting in massive economic gains.

• **Reduced Costs**
  Improved knowledge of animal health facilitates future management decisions and reduces the cost associated with the disease.

• **Informed Animal Management Decisions**
  Informed business decisions could be made with increased animal behavior monitor analytics with machine learning.
Our Approach

We have enabled farmers to adapt Azure technologies for remote support and automation successfully from traditional methods with our three-pronged approach of:

• **Innovation Drug Manufacturing**
  Helps the pharma companies in understanding the cattle health condition to provide medical help, propose relevant medications/Drugs, develop new drugs, & specific preventive measures + education

- Building a business case with a design thinking approach in **2 to 4 weeks**
- Choosing right cost optimized Azure services with proof of value solutions in **4 to 6 weeks**
- Incremental rollouts for quicker business value realization
Customer Story

A leading animal healthcare organization leverages WinVision AI Animal Health solution to optimize their healthcare process and mitigate the animal disease caused across the industry. By leveraging cloud services, the storage and processing of images are automated by leveraging Azure custom vision services, which helps in image classification.

Additionally, the review/learning process with SMEs is automated using Azure Form Recognizer, which is a cloud-based Azure Applied AI Service that uses machine-learning models to extract and analyze form fields, text, and tables from the documents.

Various Applications

• Milk Harvesting Management, Breeding Management
• Feeding Management, Heat Stress Management
• Animal Comfort Management, Behavior Monitoring & Control
• Others (Calf Management, Genetic Management, Cattle Sorting, Weighing, Data Analysis, Decision Support, And Financial Management)
WinVision AI
Animal Health Solution

WinWire

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Experts in Azure, App Modernization and Data & AI

Finalist - Microsoft Partner of the Year Awards 2021 for Healthcare & App Modernization

Member of Microsoft’s AI Inner Circle Partner Program

14 Microsoft Gold Competencies

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