



HerdWhistle™

HerdWhistle is a Precision Livestock business providing Artificial Intelligence, Blockchain, Cloud based and Data solutions to the Precision Livestock industry.

HerdWhistle provides the livestock industry with a fully integrated phenotypic data capture system that acquires bio-informatic data 24/7 from their animals and in real-time.

Overview

Based in Calgary, Alberta, HerdWhistle was incorporated in 2019. In 2023, Alpha Phenomics and A4 Systems Corporation decided to merge their technologies, combining their expertise and research, into HerdWhistle to create the first livestock monitoring system that can predict illness and productivity, and identify the specific individuals that need attention.

Growth in protein demand requires that the livestock industry becomes more efficient. Coupled with an increasing shortage in labour, livestock operations are looking to technological solutions for improving efficiency and profitability. New technologies have arisen that not only identify but also predict conditions such as illness, pregnancy, and even metabolic efficiency. However, most of these technologies have been unable to identify the individuals affected, thus reducing their effectiveness in practise, especially in the case of large herds spread over a large area.

The combination of Alpha Phenomics and A4 Systems provides the only technology in the market that uses 3D thermal-imaging and advanced UHF identification, combined with neural networks and AI to predict and monitor specific metrics, together with the ability to identify, and locate individuals for assessment in a timely manner. This simple combination of technologies opens new opportunities for improving efficiency in livestock management with significant opportunities for improving the profitability of livestock operations.

HerdWhistle provides Advanced Identification, Traceability and Thermal Imaging for monitoring Animal Health, Growth and Weight. Within the livestock industry, HerdWhistle has created a unique product offer where serious competition is a long way off.

Led by Dr Jack Behan (CEO) and Adam Morand (COO), HerdWhistle's leadership team is made up of a combination of Animal Health, Livestock and Tech experts with industry experience and a track record of innovation, as well as previous exits.

Market Opportunity

As population and incomes rise, livestock markets are crucial for meeting the growing global demand for protein. Alongside this, there is increasing demand from consumers for protein sources that address animal welfare and greenhouse gas issues.

The Livestock and Meat Market size is expected to grow from USD 461.96 billion currently to USD 604.34 Bn by 2028, at a CAGR of 5.52%⁽¹⁾. This in turn is driving growth in the global livestock monitoring market, growing from USD 5.6 billion in 2022 to approximately USD 23.35 billion in 2032, at a CAGR of ~15%⁽²⁾.

At the same time, labour shortages are intensifying as younger generations seek alternative careers.

Technology

HerdWhistle's hardware combines **multi-spectral 3D thermal imaging and metabolic bio-surveillance** for early disease detection and full body biometrics in real-time with **next-generation electronic identification and traceability hardware**.

This technology, combined with neural networks and AI provides valuable data to improve decision-making applied at an individual level.

Combined, this technology enables HerdWhistle to provide accurate data on:

- Metabolic efficiency, including greenhouse gas emissions.
- Prediction & detection of illness
- Prediction of pregnancy
- Prediction of weight, with proportion of fat%, meat%, bone%

All of HerdWhistle's solutions are real-time, non-invasive and automatic. They help livestock producers deploy existing labour more efficiently. Outputs are received and monitored in a tablet or smartphone, enabling quick decision-making on key metrics.

Example of Application: Current methods for disease management are mostly based on the metaphylactic (the treatment of healthy animals) administration of antibiotics, these costs range from \$3 to \$30 per head depending on the drug used. Because the BigEye™ can truly provide information on who is healthy, sick, and about to get sick (up to 6 days in advance), using this technology, provides real-time information that will facilitate the decision-making process of what drug to use. A more effective drug can be administered to only 10% of the population instead of 100% of the population, representing higher quality care at a 90% cost saving.

Business Model

Designed for long term revenues and healthy margins: HerdWhistle provides SAAS information to farmers, processors and consumers to inform their decision making in the areas of early warning of health problems, metabolic efficiency (including carbon efficiency), predictability of pregnancies (dairy) and 3D imaging that predicts weight.

HerdWhistle's business model adoption is comparable to a telecom contract: hardware gathers data, and customers access it via tailored applications on a monthly payment basis.

Once this data has been acquired, it can be further aggregated and analysed in real-time to qualify and quantify what is happening to those animals in real time.

Deployment of HerdWhistle data-capture hardware and the sale of data packages will ensure recurring revenues from data sales at HerdWhistle.

Blue Ocean Market

Competitive Advantage: Technology combination, IP and team expertise pose significant entry barriers to competition. Therefore, HerdWhistle is in a unique competitive position, and there is unlikely to be serious competition in this segment for the foreseeable future.

Go To Market Strategy: HerdWhistle's strategy will focus on gaining first-mover advantage. Central to this will be the installation of its hardware in as many operations as possible within the next 24 months. This will enable data collection on a large scale, setting the base for the transformation of HerdWhistle into a data company. To do this the company is looking to build a network of distributors with international reach. Additionally, it is conducting trials with important strategic operators.

Early Traction in North America & Ongoing Customer Trials

Early revenues are already coming from 6 large customers in North America. There is interest from distributors with distribution contracts either in place or in negotiation for North America, Mexico, Central America, Europe and Australia. At least one distributor has committed to invest in HerdWhistle.

HerdWhistle has signed an LOI with Farstarcap Investments Corp, a Capital Pool Company. Currently a product testing trial is ongoing with a major global distributor in Australia. Canada's livestock regulator, the CCIA, are using HerdWhistle's system with a view to implement it nationwide for traceability purposes.

Fundraising

HerdWhistle are currently looking to raise CA\$5m for launching their product range.

Traction Milestones - The Next 5 Years

Objective is to build a greater than \$100 million value Precision Livestock PubCo by creating a global category leader for remote non-invasive biometric measurement, bio-surveillance, and management of animal protein production through Imagenomics™ - a multi-species data platform for Poultry, Swine, Cattle and other farmed species.

Impact



References

1. <https://www.mordorintelligence.com/industry-reports/global-live-stock-and-meat-market-industry>
2. <https://www.precedenceresearch.com/livestock-monitoring-market#:~:text=The%20global%20livestock%20monitoring%20market%20size%20was%20accounted%20at%20USD,USD%2023.35%20billion%20by%202032.>

About Milltrust International

With its mantra of “Sustainable Prosperity”, Milltrust International Group is a global investment organisation making sustainable impact investments in the biggest themes of our generation: climate change, the demand for food and protein, the future of medical technology, and the rise of the developing world.

Over the past decade, Milltrust has assembled a highly experienced team of leading industry professionals focused exclusively on providing investment management expertise on both public and private markets.

Milltrust’s private investments consist of a plethora of science-backed early-stage disruptive companies in the space of climate impact, healthcare, and agriculture. By drawing on the experience of investment bankers, asset managers, healthcare professionals, and agronomists, our diversified assets have pioneered breakthrough technology in environmental management, medical diagnostics, and animal genetics and welfare with the aim of delivering sustainable solutions an ever-growing and increasingly ageing global population.

About The British Innovation Fund II

The British Innovation Fund II follows on from the success of The British Innovation Fund I, investing into high potential companies with a focus on agri-tech, the future of healthcare, climate impact, and alternative protein, where incontrovertible science is at the core of the commercial proposition.

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