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Engage Mobile

How mHealth and the IoAHT is Impacting Animal Health

Mobile health reached a tipping point in 2016, according to a recent report from digital health venture fund Rock Health. This intense industry growth can be attributed to a number of factors, including a rise in the popularity of wearables and a strengthening national movement toward health information sharing.

Market growth is not restricted to human health, however; in recent years the impact of technology on the animal health and food production industries has become increasingly evident. The Internet of Things (IoT), specifically, is impacting both companion animal (dog, cat, and horse) health and food animal (cattle, swine, and poultry) health.

What is the Internet of Things, and how does it impact animal health?

IoT has become an increasingly important mHealth buzzword in recent years. The term refers to a system of Internet-capable devices which connect and communicate with each other. IoT's intersection with animal health has been coined the Internet of Animal Health Things, or IoAHT.

IoAHT technology can be segmented into companion animal and food animal care. Veterinary practices have already been impacted by the rise of IoAHT, and innovative new gadgets for companion animals are beginning to proliferate. The Fitbark, for instance, is a tiny collar monitor that sends data on your dog's activity and sleep patterns to your smartphone. The innovative device, and others like it, are being used to monitor pet activity for everything from surgery recover to the frequency of scratching. Grand View Research predicts the market for pet wearables will reach $2.36 billion by 2022.

In addition to allowing veterinarians to monitor dog and cat movement, pet activity trackers may begin to impact the pet health insurance markets. Just as human health insurance provides incentives and lower rates for active people, active dogs may begin to see lower costs. Active dogs with smart collars are likely to have responsible, dedicated owners – which could lead to decreased insurance costs because of their commitment to canine health.
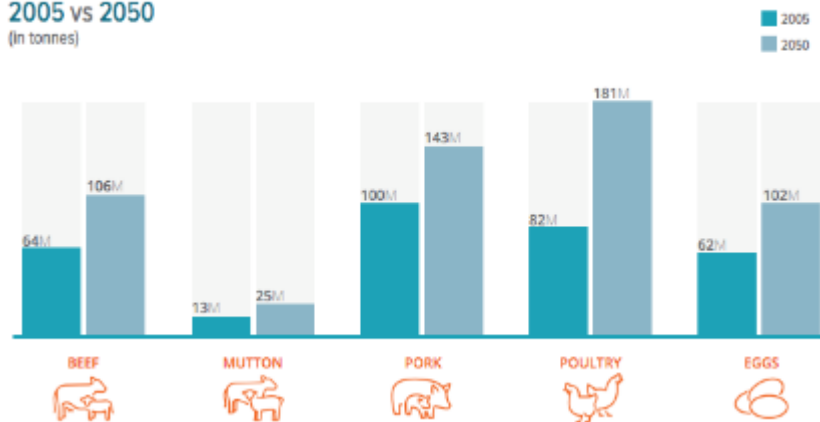
IoAHT's impact on food animal production is even more pronounced. Enabling sensor-equipped devices across the spectrum of animal health care provides large animal producers real-time health data monitoring. Afimilk's Silent Herdsman and Dairymasters's MooMonitor are examples of neck collars that tracks all cow activity including vital functions and changes in behavior. "IoAHT technology captures and records multiple attributes for each animal, for example, age, pedigree, growth rates, health, feed conversion rates, meat quality and killing out percentage," according to a Cambridge case study.

The next phase of the integration of the IoAHT and robotics is well underway in the dairy industry. Milking robots by Lely allow cows to line up for automated milking multiple times per day. With transponders around their necks, the cows get individualized service. Lasers scan and map the cows' underbellies, and a computer tracks each animal's milking speed.

GLOBAL DEMAND FOR MEAT
2005 vs 2050
(in tonnes)

It is perhaps unsurprising that smartphone use has boomed in recent years on ranches and farms, paralleling the growth of IoAHT. Real-time access to data allows for more timely decision making. And since world meat production is expected to more than double by 2023 according to OECD data, the ability to leverage technology to increase food production efficiency will likely become an increasingly important aspect of animal health and meat production.

As both the companion and food animal sectors of animal health continue to experience technological innovations, the impact of IoAHT will grow. Whether by personalizing veterinary care or improving livestock efficiency, the long-term effects of IoAHT could revolutionize treatment across the animal health spectrum.

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Engage Mobile builds custom animal health and enterprise strategy and software solutions that leverage mobile and cloud technologies to solve unique business challenges. Contact Engage Mobile to learn more about leveraging IoT and other mHealth technologies.