



# PET TECHNOLOGY

## CONTINUES TO GROW MARKET SHARE

- According to the American Pet Products Association (APPA), there are an estimated 163.6 million pet cats and dogs in the US.
- The APPA estimates that Americans will spend more than \$60 billion on their pets in 2015.
- In-home cameras and smartphone apps that can be controlled remotely allow pet owners to water, feed, communicate with and monitor their pets from afar.
- Human fitness technology is now being adapted for pets, too, and this market will be limited only by technology, creativity and funding in the future.

**ROBERT KELLY**

GUEST WRITER

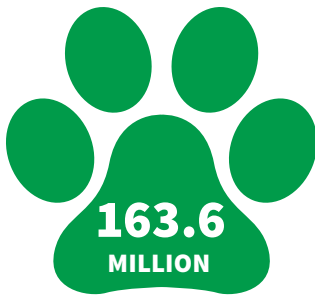
**DEBORAH WEINSWIG**

EXECUTIVE DIRECTOR – HEAD OF GLOBAL RETAIL & TECHNOLOGY  
FUNG BUSINESS INTELLIGENCE CENTRE  
DEBORAHWEINSWIG@FUNG1937.COM  
US: 646.839.7017  
HK: 852.6119.1779  
CHN: 86.186.1420.3016

# PET TECHNOLOGY

## CONTINUES TO GROW MARKET SHARE

### EXECUTIVE SUMMARY



Americans will spend more than \$1,600, on average, on each of their 163.6 million pet cats and dogs in 2015.



Americans will spend more than \$1,600, on average in 2015

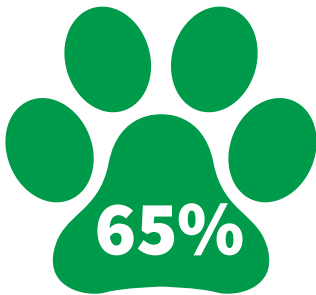
**W**ith pets of one kind or another in more than six out of every 10 American households, it is easy to see why the APPA, the leading industry trade association, estimates that US pet owners will spend more than \$60 billion on their domestic animals this year. Figures from the association show that Americans will spend more than \$1,600, on average, on each of their 163.6 million pet cats and dogs in 2015. More than a third of that total will be spent on food, and Americans are increasingly purchasing more expensive, healthier food specifically targeted to pets' particular ages and breeds in hopes of providing them with better health.

Smartphones, along with new apps and products, now allow owners to remotely monitor, feed, water and release treats for their pets. Some technologies even unlock home doors and relock them remotely to allow dog walkers and pet sitters access to pets while their owners are away.

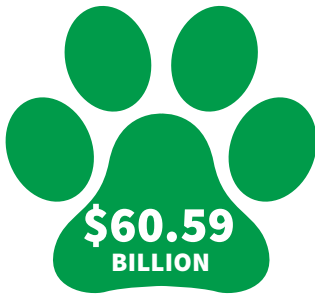
Wearable fitness technologies have been adapted for use with pets, too. Wearable devices track pets' whereabouts and monitor activity levels, heart rate, respiration and other fitness indicators, providing information to pet owners who are concerned with their pets' health and activity levels.

The latest product developments allow owners to monitor their pets' behavior in the home while they are away and communicate with pets via smartphone apps, tablet screens and speakers. Petcube, a camera that allows owners to view their pets and talk with them, is at the top of the list of fast-selling items. Other products have built-in digital screens that allow for two-way video and audio "conversations" with pets. Also on the market are collar attachments and collars with sensors that monitor health functions, and small cameras that give owners a dog's-eye view of what is happening at home while the owners are away.

Many devices also have GPS locators to help owners instantly locate missing dogs or cats. The FitBark activity monitor is one of the leaders in the industry, and Whistle—which became a much bigger player when it acquired Tagg early this year—offers a pet wearable that combines both activity monitoring and location tracking in one product. The use of technology for pets will continue to grow as owners seek to care for their pets' health in new and unique ways.



*APPA's 2015–2016 National Pet Owners Survey showed that 65% of US households (79.7 million) own a pet.*



*According to APPA, the leading not-for-profit trade association of pet product manufacturers and importers, Americans will spend an estimated \$60.59 billion on their pets in 2015.*



## INTRODUCTION TO PET TECH

According to APPA, the leading not-for-profit trade association of pet product manufacturers and importers, Americans will spend an estimated \$60.59 billion on their pets in 2015. APPA's 2015–2016 National Pet Owners Survey showed that 65% of US households (79.7 million) own a pet. According to the survey, 42.9% of US households own at least one cat, 54.4% own at least one dog and 12.3% own freshwater fish. The survey shows that there are 85.8 million pet cats in the US, along with 77.8 million pet dogs. There are also 95.5 million fish swimming around in owners' home aquariums.

The survey results indicate that Americans will spend an average of \$1,651 on their dog and \$1,615 on their cat this year, including vet visits, surgeries, food, food treats, vitamins, boarding, grooming and grooming aids, and toys. Older Americans are supporting the industry's growth, with pets filling the void left by children who have grown and moved away from home.

The APPA survey also indicated that \$23 billion of the total \$60 billion will be spent on food—much of it on more expensive, healthier food. Pet owners who are following a healthy lifestyle are more likely to ensure that their dog or cat is doing the same. Pet food sales numbers show that owners are purchasing more breed-specific, age-specific, vitamin-infused and additive-enhanced foods in hopes of keeping their pets more fit and healthy.

If the pet items on display at the 2015 Consumer Electronics Show become the norm, the APPA will soon need another category in its annual national pet survey—pet tech—and the total dollars spent by Americans on their pets will see a sizable increase. Communication devices that work with smartphones, remote food and treat release units, electronically controlled feeding systems, tracking devices, and fitness evaluators are all part of this category of products, and many of these items are either already on the market or under development.

There is little doubt that these products will sell. The latest devices and technology for four-legged friends could reach an estimated \$2.6 billion by 2025, according to CBC News. The National Retail Federation says Americans already spend \$350 million on Halloween costumes for their pets each year, and if pet owners are willing to spend big on a costume to make their pet look cute for just one holiday, the rapidly changing pet tech category is surely set to grow.

## PET TECH PRODUCTS

**Petcube** is an interactive, Wi-Fi pet camera that features a wide-angle (138-degree), real-time high-definition camera that allows an owner to talk to a pet via a built-in microphone and speaker. The Petcube also has a unique laser pointer that is operated from the owner's smartphone, enabling the owner to play with the pet. Photos taken from the smartphone or from the Petcube camera via the Petcube app can be shared on social networks. Private accounts for family and friends can be set up, so they, too, can view and play with the stay-at-home pet. The Petcube retails for \$199.



A step past the Petcube is **Petzi**, an interactive device that allows the absent owner to activate a camera, and watch and talk to the pet via a smartphone app and the speaker in the Petzi. Owners can also take photographs if desired. By tapping on their smartphone, owners can trigger the Petzi to dispense small treats. The system is \$169.99.



**iCPooch** lets pet owners conduct two-way video chats with their pet via a smartphone app. The unit holds treats and allows the mounting of a smartphone or a tablet on the front. Owners can have two-way video chats via the two devices, and tap their own phone to dispense a treat for the pet watching on the other end. The unit is available for \$99.





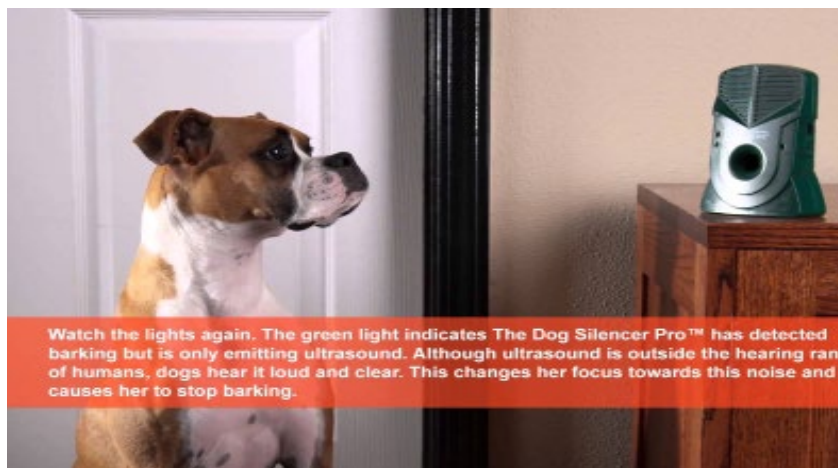
**PetChatz** is another two-way video and audio unit that allows owners to interact with their pets remotely. This wall-mounted unit comes with a variety of options, including high-definition video, essential oils for scent dispersal, scented pads and a built-in LED screen. Prices range from \$299–\$479



Dogs with separation anxiety, fear of thunderstorms or barking issues may find solace with **Pet Tunes**. A mobile Bluetooth speaker, Pet Tunes is preloaded with special-frequency original music by Pet Acoustics. The music is tuned specifically for sensitive canine ears, and the small four-inch cube features an easy click-and-play function with a built-in repeat mode. The music, designed by composer and researcher Janet Marlow, is clinically proven and endorsed by veterinarians. Available on Amazon, Pet Tunes ranges from \$54–\$59.



Barking dogs in the neighborhood can trigger a bout of barking from even the best-trained canines. **The Dog Silencer**, priced at \$99.95, detects barking up to 75 feet away and emits safe and humane ultrasonic frequency sound waves to silence the barking.

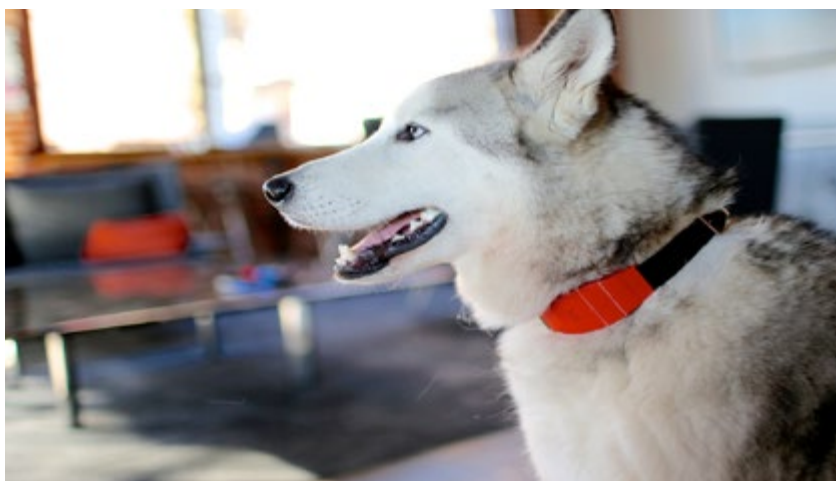


Watch the lights again. The green light indicates The Dog Silencer Pro™ has detected barking but is only emitting ultrasound. Although ultrasound is outside the hearing range of humans, dogs hear it loud and clear. This changes her focus towards this noise and causes her to stop barking.

Many of the new devices on the market are wearables that track a pet's activity, location, sleep habits and patterns. Some even record physical activity, which can be live-streamed to the owner's smartphone.



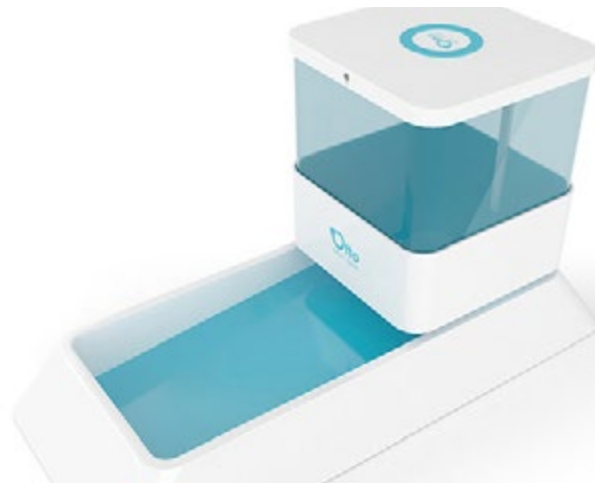
The **WUF dog collar** is an all-in-one device that includes an activity tracker, location tracker and speaker/microphone. It analyzes a dog's physical activity, and the built-in GPS shows the animal's location at all times. The collar can be preordered for \$129 at [Getwuf.com](http://Getwuf.com).



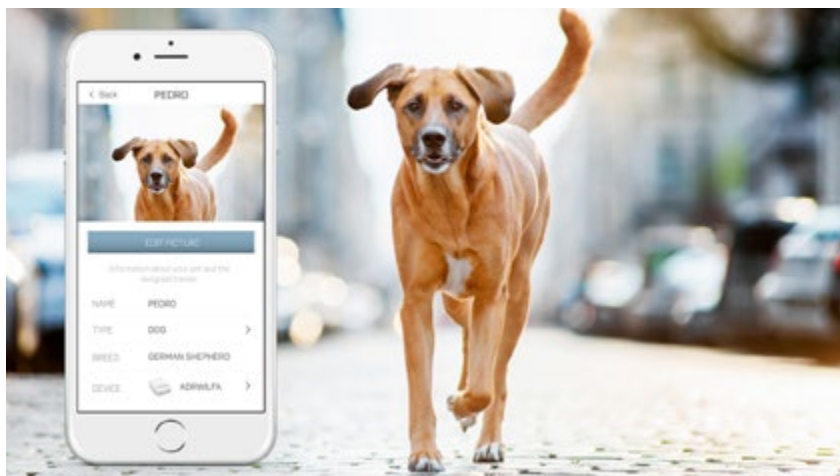
**Heyrex** is a wearable biosensor that attaches to a dog's collar and monitors the dog's activity, behavior and well-being, allowing the owner to build a long-term picture of the pet's behavior. The device is available on [Heyrex.com](http://Heyrex.com), and costs \$199.95 plus a monthly \$9.95 user fee.



The **Otto Petcare System** is composed of a dog collar that collects and sends activity data to the cloud and a food dispenser that calculates the amount of food required based on the animal's energy expenditure. The food dispenser is remote controlled, so food can be released via smart-phone. Also included in the system are a webcam that allows the owner to see that the food has been eaten and a speaker that allows the owner to talk to the pet. The venture was fully funded on Indiegogo and customers can preorders via the website.



The **Tractive pet-tracking device** is GPS enabled to help owners locate a missing pet. The device attaches to a regular pet collar and an accompanying app lets the owner locate the pet in real time. The device is available for \$129.99 at Tractive.com.



**voyce**

An all-in-one wearable for dogs, **Voyce** allows owners to monitor vital signs such as heart rate and respiration levels, check symptoms, seek expert advice, and set goals and reminders, as well as store a pet's medical record in the cloud. The product is priced at \$199 plus \$9.50 monthly for data usage at Voyce.com.



**PetPace™**  
Monitoring your pet's health

**PetPace** is another sensor-driven smart collar for both cats and dogs. It measures body temperature, pulse, respiratory rate, activity level, calories burned and body position. The data is then sent via the cloud to a dedicated app on the owner's smartphone. If any of the pet's vital signs are out of a healthy range, the app lets the user know. The data can also be forwarded to a veterinarian. The collar is priced at \$149.95 at Petpace.com and users are also required to pay a \$14.95 monthly data fee.





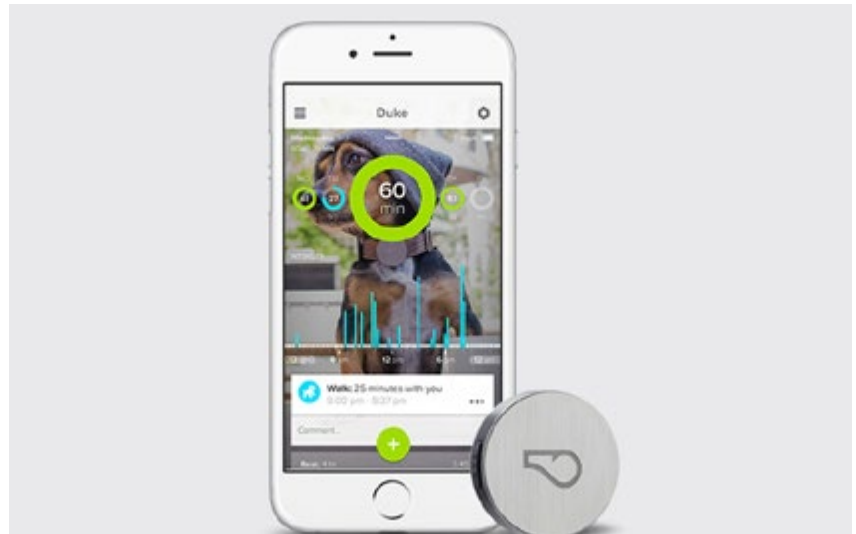
**Loc8tor** is a GPS-enabled wearable device for both cats and dogs that allows owners to know where their pet is roaming. The device can be ordered at [Loc8tor.com](http://Loc8tor.com) for \$131.18 for dogs. The cat model is currently sold out, but a new version is supposed to be available at the end of November 2015.



**FitBark** is an activity tracker for dogs that monitors movement and downtime. FitBark has a community aspect, in that it allows owners to compare their dog's activity to that of other dogs of a similar breed. The data gathered can also be shared with veterinarians. FitBark is available for \$99.99 at Best Buy and Target.



**Whistle** is a device that attaches to a dog's collar and allows owners to track walks, playtime and periods of rest. An accompanying app allows users to set goals and track their pet's progress over time. The activity monitor is priced at \$99 at [Whistle.com](http://Whistle.com). Whistle acquired Tagg early in 2015, and has incorporated many of Tagg's features into its new Whistle device, which functions as an activity tracker, location tracker and ambient temperature sensor all in one. The device's GPS system alerts the owner when the dog is not where it is supposed to be and the activity tracker allows the owner to see how much exercise the dog has had during the day. The ambient temperature sensor alerts the owner if the dog is in a dangerous situation near heat.



**GoPro Fetch** is a comfortable, durable harness that secures a GoPro camera to a dog, enabling the owner to see the world from the dog's point of view. It is priced at \$59.99 at [gopro.com](http://gopro.com).



## HALO BELT

Safety, illumination and conversation starting are all benefits that the **Halo Mini** provides. The super-bright collar provides illumination for pets during night walks, and draws attention from a safety standpoint. The collar is reflective and water resistant and recharges the same way a cell phone does. It is priced at \$35 at [Halobelt.com](http://Halobelt.com)





**Binatone**, a maker of home-monitoring products, has a new smart collar for dogs that allows owners to track, train and communicate with their pets remotely. Named the **Scout 5000**, the collar uses its cellular connection to remotely sync with the owner's smartphone and provide live data. The built-in GPS provides real-time data on the pet's location, and the device's battery lasts about two weeks before it needs to be recharged. The collar also has speakers, so the owner can talk to the dog remotely, or receive alerts when it is barking. There is a camera on the collar that can either take pictures or provide streaming live video. About eight hours of video footage can also be stored on the collar's SD card. Nighttime video can be viewed through a night vision mode. The collar can also function as a training device and can emit a high-pitched, ultrasonic sound that dogs can hear to correct bad behavior. Processing all the data from the smart collar is the company's Hubble app. Binatone is developing the smart collar for Lenovo subsidiary Motorola Mobility, which will sell it under the Motorola brand. It is available for \$199, including a year of service.



Barcelona-based **Bios Urn** has been producing biodegradable urns that use loved ones' ashes to help grow a tree after their death. The firm is now offering the Bios Urn for Pets, made from 100% biodegradable materials, without use of glues or chemical additives. It can be supplied seedless, or with a maple, pine, ginkgo, beech or ash seed. An existing sprout, shrub or plant can be used in place of a seed. Ashes are placed in the lower portion of the urn, and the seed in the upper module along with the supplied growth medium and some soil from the area in which the urn will be planted. The urn is then placed about two inches below the surface of the soil and watered for growth. Ongoing care is required, as would be the case with any normal tree. The urn is available online and costs \$145 plus shipping.



## CONCLUSION

---

Pet cats and dogs are more than just animals that spend part of their lives with their owners. In most cases, they become family members and, often, the focus of cherished family memories. Accordingly, the more than 160 million pet cats and dogs in American homes have spurred an industry complete with designer clothing, cages, beds, food, collars and leashes.

Technology for pets is becoming an increasingly large segment of the \$60 billion pet market in the US. Products in this fast-growing sector allow owners to watch, monitor, feed, water and communicate with their pets even when the owners are not at home. Wearable device technology is being adapted for pets, too, allowing owners to monitor the location, health functions and activity levels of their pets.

With Americans treating pets like family members and willingly spending hundreds of dollars annually to provide better care for them, the industry is just beginning to find ways to adapt and increase the use of technology for pets.

---

**Deborah Weinswig, CPA**

Executive Director—Head of Global Retail & Technology  
Fung Business Intelligence Centre  
New York: 917.655.6790  
Hong Kong: +852 6119 1779  
deborahweinswig@fung1937.com

Filippo Battaini  
filippobattaini@fung1937.com

John Harmon, CFA  
johnharmon@fung1937.com

Aragorn Ho  
aragornho@fung1937.com

John Mercer  
johnmercer@fung1937.com

Shoshana Pollack  
Shoshanapollack@fung1937.com

Kiril Popov  
kirilpopov@fung1937.com

Jing Wang  
jingwang@fung1937.com

Steven Winnick  
stevenwinnick@fung1937.com

Eddie Wong  
eddiewong@Fung1937.com

---

**HONG KONG:**

10th Floor, LiFung Tower  
888 Cheung Sha Wan Road, Kowloon  
Hong Kong  
Tel: 852 2300 2470

**NEW YORK:**

1359 Broadway, 9<sup>th</sup> Floor  
New York, NY 10018  
Tel: 646 839 7017

**LONDON:**

242-246 Marylebone Road  
London, NW1 6JQ  
United Kingdom  
Tel: 44 (0)20 7616 8988

**FBICGROUP.COM**