

# Technology In Our Lives

## Look, Up In The Sky: It's A Bird, It's A Plane, It's Satellite!

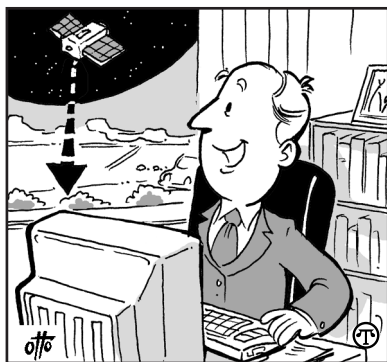
(NAPSA)—What do paying for gas at the pump, watching your favorite shows on television and using your bank card at a fast-food restaurant have in common? All three are made possible by satellite-based technology. In a period of just over 50 years, the satellite industry has become a major home entertainment, information, technology and retail payment solution force.

### How It Works

A satellite in fixed orbit stays in the same position above the ground at all times, which allows satellite antennas (e.g., a TV station or programming service) to transmit and receive signals from any part of the Earth's surface. A transponder, located on the satellite, receives the signals and converts them to a frequency that can be received by a ground-based antenna (i.e., your satellite dish).

The transponder then beams the signal back to Earth. In order to minimize interference between transponders—there are typically between 24 and 32 of them on each satellite—the signals are transmitted with alternately polarized antennas. That's what makes satellites efficient at delivering hundreds of different channels to hundreds of different locations across the country.

In terms of satellite television, advances in the technology have made it available—through a small, affordable dish and receiver—to more than 8 million customers. But there's much more to satellites than television programming. For starters, they can help millions of people pick up



**Satellites help put the tools you need—for retail payments, TV programming, even high-speed Internet—at your fingertips.**

speed—with their Internet connections, that is.

People in remote or rural locations are frequently unable to receive broadband Internet access, primarily due to a lack of infrastructure. If there aren't enough potential customers in a given area, it's not worth it for cable or phone companies to lay the cable necessary for high-speed Internet service. That's where satellite comes into play.

While only about 5 percent of rural towns with populations of less than 10,000 have access to broadband, satellite provides that access and makes it possible for citizens in all parts of the country to enjoy the advantages of the Internet. To get started with a satellite Internet service such as HughesNet, no wires or phone lines are necessary; just a clear view of the southern sky.

To learn more about high-speed Internet access with satellite technology, go to [www.hughesnet.com](http://www.hughesnet.com).