



WHERE THE WATER IS FLOWING

New Trends in Plumbing Technology

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When you think about all of the categories within a home improvement store where technology has had an impact, plumbing may not be the first to come to mind. However, technology is playing an increasingly important role in the plumbing department whether in the form of products designed to make the kitchen and bath more comfortable, keep living spaces more sanitary or reduce a home's impact on the environment.

Understanding what new options are driving product changes within the plumbing category will also be important as more homeowners look for the latest tech options to spruce up their homes.

Overall, the plumbing category is expected to see steady growth over the next several years as homeowners

begin to make greater investments in home remodeling projects.

The plumbing fixtures and fittings market "is projected to advance 6.3 percent per year through 2017 to \$12 billion. The residential market will account for over three-fifths of demand and will see the most rapid gains," according to research from the Freedonia Group.

While tech-driven products will only represent a portion of these sales, it is important to understand that as younger consumers gravitate to more high-tech living spaces, these future-forward options in plumbing will certainly have an impact on consumer demand.

In this story, we'll discuss some of the latest technological trends in the plumbing category. We also



distributed a questionnaire to a panel of retailers who provided their insights on plumbing trends and on the role technology is playing in the evolution of the category.

Adding Value to the Home

When consumers are in the market to upgrade their surroundings, they are considering projects that will customize their homes while making them more comfortable as well. This often means starting in the kitchen and bathroom, the two rooms where homeowners traditionally spend the bulk of their time.

Whether retailers have large showrooms filled with plumbing fixtures and the latest appliances or only offer a convenience assortment of those products, their understanding of the future of plumbing technologies can help determine long-term inventory game plans.

To discover retailers' opinions on these new technologies, we sent a questionnaire to a panel of home improvement retailers. All of the responding retailers sell plumbing products in their stores, and the majority believe technology will continue to make its way into customers' homes through that category.

What we discovered from this panel was that nearly 2/3 of respondents felt that homeowners' desires to build a smarter home will continue and that plumbing products will be part of this trend.

Technology Adds Personal Comfort

Many of the newest technologies in the bathroom and kitchen are designed around adding

Home improvement projects that increase property value include upgrades to the bathroom and kitchen.

personal comfort for users. For example, more and more products are being introduced that allow users to stream live music to their showers through wireless technology. One system even allows users to control lighting and water pressure through a digital interface.

Not only is bathroom music emerging in the plumbing category, but LED lights are also being integrated into plumbing products. Examples of products incorporating LED technology include lights in toilet bowls, which illuminate the commode for nighttime use. Also new on the scene are LED light rings in bathroom sinks that glow red or blue to indicate water temperature.

Green Products Save Resources and Money

While streaming music in the bathroom and shower control systems are gaining attention, environmentally friendly plumbing technology is also growing in consumer interest.

Environmental products are not only relatively affordable, but they also save money by reducing water use over time without compromising day-to-day use. Products that are innovative and promote green building practices are great items for retailers to offer, as consumers will begin to make the switch over time.

Of the retailers we reached out to for our questionnaire, nearly 90 percent already provide green products in their plumbing category. When asked if customers were actively seeking out green products, 47 percent of the retailers say they have had customers coming into their stores and requesting these green, money-saving products.

One example of appliances that integrate both technology and eco-friendly functions can be found in dishwashers. Manufacturers are continuing to develop products that meet higher energy-efficiency standards and save water, with some using water from the rinse cycle for the next wash. An average family who washes dishes four times per week could save 700 gallons of water each year through the use of a smart dishwasher, according to Reviewed.com.

Additional emerging technologies combine home automation technologies with green practices. For example, new sprinkler systems attach to controllers that use Wi-Fi to download seven days of weather forecasts, adjusting the sprinklers accordingly.

Finding ways to conserve and, in some cases, reuse, water, is extremely important, according to an article on Ecobuildingpulse.com. Builder Online states that the cost of water is rising, increasing 6 to 7 percent a year.

With this increase in cost, consumers will be looking to hardware retailers for plumbing products that decrease water use without affecting their day-to-day activities. One way to make this transition is through a greywater recycling system.

This system uses water from showers, sinks, washing machines and dishwashers that is relatively clean, containing very few pathogens. This water, unlike black water, which comes from toilets, requires very little treatment before it can be reused for non-drinking purposes, such as for toilet flushing and lawn watering with sprinkler systems.



How Much Water Do We Use?



Home Water Usage

Americans use an average of **100 gallons** of water a day at home.



Indoor vs. Outdoor

70 percent of daily water use occurs indoors, with **30 percent** of water used for land irrigation.



Flushing Away Money

Toilets account for approximately **27 percent** of a household's water use.



Water Bill Woes

The average household spends as much as **\$500 per year** on their water and sewer bill and can save about **\$170 per year** by installing water-efficient fixtures and appliances.



Constant Leaks

14 percent of daily water use occurs from leaks. An average household's leaks can account for more than **10,000 gallons** of water wasted every year, or the amount of water needed to wash 270 loads of laundry.

Source: US Environmental Protection Agency



Greywater systems reuse water from the home. Lawn sprinkler systems can use this water.

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The cost of installing a greywater system into a new home ranges from \$500 to \$2,500, according to an article from HGTV. Continuous technological advancements will allow this system to be integrated into more homes.

Another eco-friendly product that continues to gain popularity in the plumbing category is the tankless water heater. A storage water heater is an insulated tank holding 20 to 80 gallons of water. Tankless water heaters provide constant hot water and energy savings. A 2008 Consumer Reports' article found that tankless water heaters use about 22 percent less energy than their storage-type counterparts.

Despite the benefits in water savings, tankless units tend to be more expensive than storage units so retailers should be able to discuss the positive and negative aspects of these products.

In addition to some of the newer, technologically advanced green products mentioned above, green practices in plumbing have led to a new program, called WaterSense, from the United States Environmental Protection Act (EPA). The WaterSense program was created to find ways to use water efficiently for consumers, communities and the environment, while helping conserve resources for the future. Retailers interested in having WaterSense-labeled products can work with the EPA to get approved products in their stores.

look for



While green practices are sure to continue to evolve and develop, retailers who have environmentally efficient products should communicate to their customers the green options provided in-store. Not only will it aid those looking to save money on their water bills, but it will also contribute toward better conservation practices.

Plumbing Innovation Leads to a Healthier Home

Keeping a healthy home can be done in a variety of ways, and several new plumbing products help aid in a more hygienic living space. Touch-free faucets are becoming an option more homeowners consider, as they allow users to have a hands-free experience while also avoiding the spread of germs and contaminants. According to an article by *Plumbing and Mechanical* magazine, “hands-free faucet technology will continue to evolve and will likely be offered on more and more items through more and more manufacturers.”

In the bathroom, a touchless toilet allows the user to wave their hand above the toilet to flush it. After they're finished, the toilet lid will automatically close without slamming.

Only 20 percent of retailers from our questionnaire offer touchless technology for



Photo Courtesy of Delta

Touch-free toilets allow users to avoid the spread of germs when using.

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Photo Courtesy of Moen

For the individual who spends a lot of time in the kitchen, touch-free faucets allow for easy access to water without spreading germs.

Touch-free faucets are becoming an option more homeowners consider, as they allow users to have a hands-free experience while also avoiding the spread of germs and contaminants.

customers to buy; about 30 percent of retailers say they have customers seeking touchless technology for their homes.

Technological advancements also have had an impact on water filtration both for the whole house and at point of use. According to NSF International, previously known as National Sanitation Foundation, home water treatment systems fit in one of two categories, either point-of-entry or point-of-use systems.

Point-of-entry systems treat an entire home from the moment water enters and are usually installed at the water meter or pressurized storage tank and include water softeners, as an example.

For retailers, point-of-use systems cover a wide range of products throughout the home and give the opportunity to sell replacement filters. Water filters for faucets in the kitchen or bathroom are great options as they improve the quality of drinkable water from the tap. The need for filter replacements will also bring customers back to the home improvement or hardware stores frequently.

Consumers are looking to have filtered water from the moment it enters the home. Many customers also are interested in different products for throughout the home that filter water when necessary. In addition, customers are buying filters for water filtering systems inside their refrigerators.

Retailers looking to expand upon filtration products should consider stocking filtered water bottles and pitchers with pour-through filters. Once again, these will require filter replacements and in turn will keep customers returning every few months.

Whether trying to avoid germs that build up on faucets or filtering out contaminants from tap water, advancement in regards to home health is becoming an established feature retailers can promote.

How Retailers Can Take Advantage of Plumbing Technology

As customers' plumbing purchases continue to trend toward new and exciting technologies, retailers looking to embrace these new products will likely see an increase in customer traffic. By promoting the trends available to customers looking to replace a sink, toilet, kitchen appliance or more, retailers can establish their business in the community and stay ahead of the curve.

Visit hardwareretailing.com/plumbing-technology to download a PDF plumbing handout and full-page water fact sheet. ➡