

# Smart Homes and Hotels

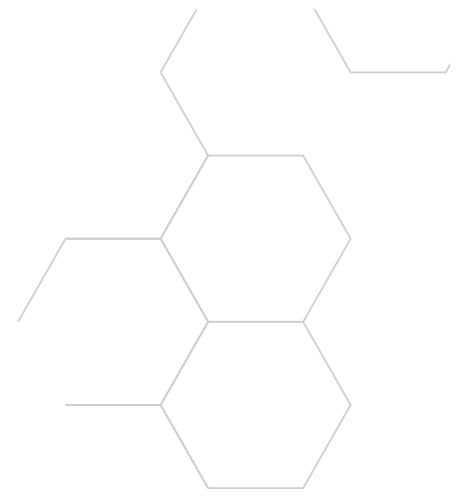
A guide to tech-enabled products in the kitchen and bathroom

THE BOLD LOOK  
OF **KOHLER**®



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## Introduction

Smart devices and tech-enabled products are changing the way homeowners, renters and guests interact with their spaces. From virtual assistants and smart speakers to TVs to connected home devices and so much more, every room in the house is becoming smarter.

Consumers and guests turn to smart devices and tech-enabled products because they make their lives easier. They help get household tasks completed with less time and effort, and they provide entertainment and conveniences traditional products can't provide. Smart and tech-enabled products are not a thing of the future. In fact, 73%\* of homeowners have a smart device, 59%\* say smart devices help them in the kitchen, and 41%† say they listen to music in the shower.

Therefore, specifying, installing and designing spaces with smart devices and tech-enabled products in mind is becoming more crucial. This guide is meant to remove the stigma surrounding these products, especially in the kitchen and bathroom, by answering some of the most frequently asked questions on the subject. For specific information on KOHLER® smart and tech-enabled kitchen and bathroom products, please visit SmartHome.KOHLER.com.

\*Savvy Home Design Forum for Kohler: Smart Products Survey (2019)

†Savvy Home Design Forum for Kohler: AI Speaker Survey (2018)





## What is a smart product?

### Q: What does it mean to have a smart home or space?

**A:** A smart home is a home or space with electronic devices and products that perform tasks either automatically, by remote or touch screen, or by voice command. These products are connected to other smart devices or networks. This allows them to “talk” with one another to coordinate tasks more efficiently, alert you to issues or potential problems, and generally make life a little easier.

### Q: What's the difference between a smart device and a tech-enabled product?

**A:** As mentioned above, smart devices are typically connected to a network, for example, via cloud computing, and communicate with one another. Tech-enabled products are not necessarily connected to a network nor do they communicate with other products or devices. Tech-enabled products use enhanced innovations and technology to elevate a consumer or guest's experience within a home or hotel.

### Q: What do tech-enabled kitchen and bathroom products mean?

**A:** Tech-enabled kitchen and bathroom products represent the next generation of toilets, showers, faucets, mirrors and more. The innovative features and benefits that drive tech-enabled kitchen and bathroom products elevate everyday experiences. For example, KOHLER® digital showers give you unprecedented control over your daily shower routine compared to a manual shower—from precise temperature to music and so much more. KOHLER intelligent toilets provide better personal cleanliness, more comfort and convenience when compared to traditional toilets. They also offer intuitive remotes that operate just like a smartphone. The Verdera® Voice lighted mirror lets you orchestrate your bathroom experience using only your voice.

### Q: Are smart and tech-enabled products harder to install, service and maintain?

**A:** As with any new product, a learning curve is involved, but it becomes routine to install, service and maintain once you're familiar with it.

Brian Spegal, owner of Spegal Plumbing, LLC, which handled the installation of DTV Prompt® digital showering systems in a new development in Orlando, Florida, says “This product has a pretty quick learning curve. The team just loves the system from an installation standpoint. Reliability is also key—we've had minimal problems with installed units.”

Adam Torrison, Master Plumber at Gen 3 Plumbing, says “If you understand a smartphone, you can navigate through startup procedures fairly easy.” Torrison says if you're replacing a traditional product with a smart product, “There might be an extra step like connecting to Wi-Fi, installing the KOHLER Konnect® module or programming the system to fit your workout schedule or mood. Initially there will be a small amount of difficulty installing tech-enabled products, but that changes after installing a few of the products. We have learned to ask certain questions to the customer before we install the product that can make it a faster and easier install. Some basic questions we ask are: Do you know your passwords? Where is the router located? Do you have a smartphone?”

Kohler provides an array of resources to help install, service and maintain KOHLER tech-enabled products, including the Pro Toolbox, an all-in-one online resource for plumbers, builders, architects, designers and remodelers. The Pro Toolbox provides industry insights, literature, specification tools, trade support and more. A trade hotline is available to answer any product-related questions. Kohler also has a growing library of installation videos that walk you through every step of the process.



Sign up for the Pro Toolbox for resources, tools, training, installation videos and more.



**Q: Does every tech-enabled plumbing product require an electrician for installation?**

**A:** It largely depends on whether the product is a new install, says Adam Torrison. “When updating existing products to be intelligent or ‘smart,’ whether you need an electrician depends on the product you’re replacing. If it has power already to the fixture, then an electrician is not required as long as power requirements are met for the new fixture to be installed.” For new installations, “DTV showers need power for valves and the control box. Intelligent toilets need GFCI outlets behind them. Veil® wall-hung toilets need power in the carrier. Sensate® faucets that are not battery-powered need power under the sink.”

**Q: Do smart or tech-enabled plumbing products sacrifice design for functionality?**

**A:** Not at all. Kohler offers a wide range of tech-enabled products that coordinate with an array of tastes, styles and spaces—from charming vintage homes to ultramodern apartments. At first glance, some tech-enabled products look a lot like their traditional counterparts, like the KOHLER® Sensate faucet with voice-activated technology. Other products appear more “techy” than others, like KOHLER DTV+™ digital showering system or KOHLER intelligent toilets, because they feature intuitive interfaces that resemble and operate like smartphones or tablets. No matter the product, Kohler believes technology should not draw attention to itself; it should blend seamlessly with form and function for a heightened consumer interaction.



# What do consumers want?

## Q: How do tech-enabled kitchen and bathroom products benefit the consumer or guest?

**A:** The short answer is they elevate the user's experiences. Tech-enabled kitchen and bathroom products enhance how consumers and guests interact with the space by providing cleaner, more comfortable, convenient and immersive experiences. There are four key consumer needs that tech-enabled kitchen and bathroom products fulfill.

## Key Consumer Needs

### 1. Efficiency—I need to get tasks done more efficiently

Thoughtful integration of technology into bathroom and kitchen products can make tasks more seamless or even fully automated.

When asked to provide some examples of how tech-enabled products enhance her daily routine, Elizabeth Froelich, Senior Fixtures Marketing Manager at Kohler, says, "I can start my shower when I'm on my way home from the gym so it's warm as soon as I get in. Or I can start my kids' bath from the kitchen while they're still eating spaghetti."

### 2. Oasis moment—I need to escape and enjoy

Consumers and guests are increasingly placing value on spaces that are versatile and adaptable to their needs. In the bathroom, that often means a place to relax and unwind. Based on a proprietary Kohler study done in 2018, 76% of U.S. homeowners want their bathroom to feel like a spa, but only 14% describe their current bathroom that way.

### 3. Cleanliness—I need to feel clean

There's also a role for technology in delivering a greater sense of cleanliness, particularly in relation to a consumer's toilet. A recent poll found that American consumers are more open to technology-delivered features that provide a cleaner experience.

- **63%** of Americans are interested in a personal cleansing feature on their toilet. This is even higher among younger people at nearly **80%**.
- **80%** of Americans would like a deodorizing system on their toilet. This jumps to **90%** among parents.
- **60%** of Americans are interested in a motion-activated toilet seat and lid. This number is higher among parents and younger people at **80%**.
- **66%** of Americans are interested in a heated seat on their toilet. This percentage is higher among parents at **80%**.

Source: Kohler survey conducted online by *The Harris Poll* (Dec 2019)

### 4. Changing needs—I need a space that changes with me

Finally, there's the consumer and guest desire to customize the space, and their routines, according to what they need at a given moment in their day and as they age in their homes.

"The bathroom is used in entirely different ways depending on the time of day," says Jonathan Bradley, Smart Home Marketing Manager for Kohler. "The morning is more likely to be about efficiency and information gathering, which is why we see people using their Verdera<sup>®</sup> Voice mirror to find out what the traffic report looks like, or what's the first meeting on their calendar. But the evening is more about relaxing, unwinding, playing an evening playlist or running a bath."

According to The Center for Universal Design, 82% of homeowners want to remain in their homes as they age. Tech-enabled kitchen and bathroom products, coupled with the concept of universal design, encourage the creation of environments that work for homeowners as their needs change over time.

Source: The Center for Universal Design at North Carolina State University

**Q: Are smart products popular?**

**A:** Yes. A 2019 survey found that 73% of U.S. homeowners own a smart device.

Source: Savvy Home Design Forum for Kohler: Smart Products Survey

**Q: Who's buying smart devices and tech-enabled kitchen and bathroom products?**

**A:** Research by Ipsos shows that the adoption of smart products has been driven by more affluent consumers. By 2019, 43% of affluents had brought smart speakers into their kitchen, up from 27% in 2017. The percentage in the bathroom is lower at 9%, up from 3% in 2017.

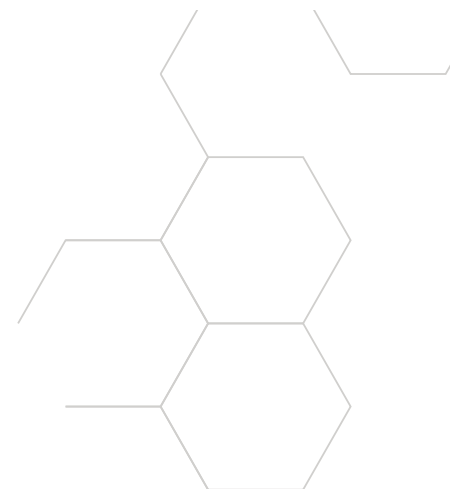
Source: Ipsos Affluent Intelligence (2020)

The desire for smart devices and tech-enabled products is growing. More than half of Americans (53%) are interested in adding technology to their bathrooms and 69% want to make upgrades to the technology already in their bathrooms.

Source: Kohler survey conducted online by *The Harris Poll* (Dec 2019)

Jeff Carpenter, Manager—Market Research at Kohler, sheds some light on this topic. “At the overall smart home level, we’ve seen a lot of growth in the last few years. So far that’s been mostly driven by categories like lighting, windows and security systems. But events like CES (Consumer Electronics Show) have shown how significantly the market has grown for smart plumbing products.”

To see the products Kohler exhibited at the most recent CES, visit [SmartHome.KOHLER.com](https://www.kohler.com/smarthome).





**Q: What tech-enabled products does Kohler offer for the kitchen?**

**A:** Kohler offers a range of touchless kitchen faucets, including the Sensate® kitchen sink faucet with voice-activated technology. KOHLER® touchless faucets feature Response® technology, which uses a state-of-the-art motion sensor for reliable activation. Touchless technology in the kitchen helps homeowners and guests speed through cooking and cleanup tasks while enjoying a cleaner, more hygienic environment.



Simplex® touchless pull-down kitchen sink faucet



Graze™ touchless kitchen sink faucet with KOHLER Connect®

**Q: Is there an easy way to add a tech-enabled product to a bathroom?**

**A:** Absolutely. A KOHLER cleansing toilet seat is a simple upgrade for an existing toilet. Kohler provides a variety of models to suit a consumer's needs, each one featuring greater cleansing, comfort and convenience than a traditional toilet.



Cleansing toilet seat

**Q: What's an intelligent toilet and why would a consumer want one?**

**A:** KOHLER® intelligent toilets use technology to provide greater cleanliness, comfort and convenience to the consumer or guest. They are next-generation toilets that feature intuitive remotes that operate much like a smartphone to control every aspect of a consumer's or guest's experience—from warm-water personal cleansing to a heated seat, a warm air dryer and more. Intelligent toilets offer customizable comfort unlike any traditional toilet.

**Q: Are tech-enabled products available for bathtubs?**

**A:** Yes. KOHLER baths featuring VibrAcoustic® technology contain hidden speakers that emit sound waves. These sound waves envelop the body and gently resound within it. Choose a soothing spa session with built-in compositions, unwind to your own music playlists or catch up on news and podcasts to create a soothing, spa-like environment.



Underscore® VibrAcoustic bath



**Q: What is digital showering and why would a consumer want it?**

**A:** KOHLER® digital showering systems elevate a consumer's daily shower routine by allowing them to control everything, including spray experiences, temperature, music, steam and more, with an intuitive interface. KOHLER digital showering products are available in a variety of platforms, so they are perfect for a simple upgrade or for a completely immersive, spa-like experience.

Digital showering systems not only give consumers and guests greater precision, control and customization than a manual shower, they also eliminate the handles and knobs of a conventional shower for an uncluttered space and clean design.

DTV Mode™ is a great entry point into digital showering with the precision of digital presets using the familiarity of a dial control. DTV Prompt® is the next level up with one-touch operation. DTV+™ is the ultimate in digital showering, bringing water, sound, steam and light together for a true multisensory showering experience.



DTV Mode



DTV Prompt



DTV+



**Q: Does Kohler offer a tech-enabled products in the grooming space?**

**A:** Yes. Verdera® Voice lighted mirror with voice-enabled technology lets consumers orchestrate their bathroom experience using only their voice. It features hands-free lighting control and integrated voice-assistant technology.



Verdera Voice lighted mirror



## What's the business opportunity?

### Q: What are the market factors driving category growth?

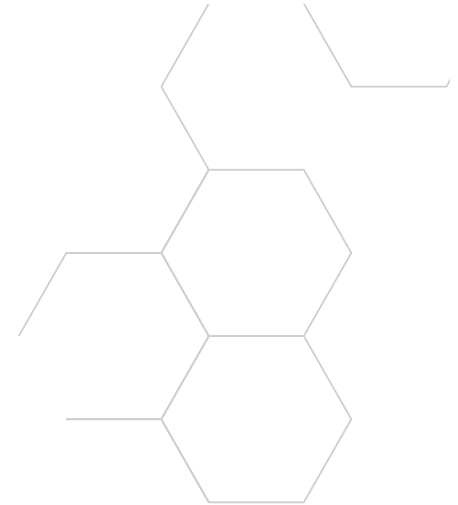
**A:** Generational change will be a significant driver as millennials continue to enter the housing market. “We consider millennials to be more receptive to and engaged with technology in general,” said Jeff Carpenter. “But we also know there are use cases that appeal to baby boomers and the generation beyond. And that’s what’s so interesting about tech-enabled plumbing—at a surface level it seems like a young person’s game, but as it becomes more typical, then it opens up to all kinds of consumer segments.”

The applications of technology-enabled plumbing in universal design are particularly interesting. By 2030, 20% of Americans will be over the age of 65, and 82% of homeowners want to remain in their homes as they age.

Source: The Center for Universal Design at North Carolina State University

DTV Prompt® and DTV+™ shower interfaces, which visually display water temperature, can be particularly valuable to consumers who have a reduced sense of feeling in their hands or other extremities.

“We hear from a lot of specifiers that technology can help prepare a space for people to live in it for a long time,” says Elizabeth Froelich. “Products like cleansing seats and intelligent toilets have a dignity aspect to them because they can reduce the dependency on a caregiver.”



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Elizabeth Froelich, Kohler Marketing

**Q: How can specifying, installing or designing spaces with tech-enabled products help my business grow?**

**A:** The short answer is differentiation. As a builder or remodeler, specifying and installing tech-enabled kitchen and bathroom products separates you from the crowd and puts you on the leading edge of a trend that is growing more and more popular. From an architect and designer perspective, tech-enabled kitchen and bathroom products provide unique and custom experiences for your clients.

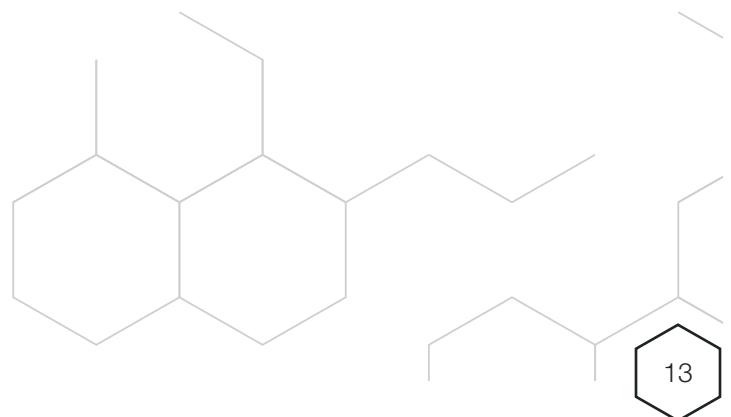
Brian Spegal, owner of Spegal Plumbing, LLC, handled the installation of DTV Prompt® digital showering systems at the Hanover Homes development. He notes that homeowners appreciate the high-tech look and feel of the system. “This smart home feel,” he said, “is really attractive to homeowners—especially millennials—who expect a certain degree of automation and connectivity in a newly constructed home.”

Kohler recently partnered with development firm BH3 on Privé at Island Estates, a luxury development in the highly competitive South Florida condo market. BH3 differentiated their project by specifying KOHLER® Numi® toilets in each condo. Michael Nuemann, head of realty for BH3, put it this way, “When our sales team takes people through the condos, the Numi toilet becomes part of the sales presentation ... When they see an item like Numi, it adds credibility to everything else we’re telling them about the project. They start to realize that if we pay attention to that kind of detail in one piece of equipment in the bathroom, we pay attention to all details.”

**Q: How do I specify, install or design spaces for tech-enabled kitchen and bathroom products without blowing up the budget?**

**A:** Kohler provides a range of experiences in every tech-enabled kitchen and bathroom category—from entry point to completely immersive. For example, Kohler offers three platforms for digital showering: DTV Mode™, DTV Prompt® and DTV+™. The same holds true for toilets; you can choose from a simple upgrade, like a KOHLER cleansing seat that can be added to an existing toilet or from a range of intelligent toilets that offer greater cleanliness, comfort, control and convenience.

Matthew Thomas, AMLI Development Associate, talks about the range of tech-enabled products Kohler offers and how it helped in the multifamily development at Chiquita in Midtown Miami. “We were able to outfit the units entirely with KOHLER products, without having to steer away because the product line wasn’t robust enough. The fact that we were able to choose different packages—not only the product type but the coloring, the technology involved—was important to us.”





**Q: Are tech-enabled kitchen and bathroom products just for premium housing?**

**A:** Not at all. Tech-enabled kitchen and bathroom products are perfect for any space where you want to elevate the everyday experience of a kitchen or bathroom product by adding control, comfort, cleanliness and convenience.

Colby Franks, Hanover Family Builders Executive Vice President, made it a point of differentiation to have tech-enabled products as the standard in every home. “When home buyers walk into the master bathroom, they’re impressed with it,” he said. “We wanted our salespeople to be able to tell them it’s standard in every home we build—not a special feature in higher-end models.” And, yet, as a production home builder, Hanover was budget-conscious in all its specifications. “Because we’re a production home builder, our budget didn’t have room to put thousands and thousands of dollars into our master bathrooms,” Franks explained. DTV Prompt® offered the perfect combination of luxury, reliability and affordability for both Hanover and potential home buyers. “It fits into a production home builder’s budget and has the KOHLER name and reputation,” Franks says. “It was a no-brainer for us.”

**Q: Are tech-enabled bathroom designs just for residential developments?**

**A:** No. In fact, as smart home tech is becoming more widely adopted in consumer’s own homes, there’s a rising expectation from consumers that hotel spaces offer the same level of experience as their home. With its intuitive interface, DTV Mode™ is a good fit for all guests, whether they’re familiar with digital showering or not.

**Q: Can tech-enabled kitchen and bathroom products work with remodels?**

**A:** KOHLER® tech-enabled kitchen and bathroom products work for both remodeling and new construction projects. Kohler recently partnered with interior designer and real estate developer Anthony Carrino. He turned a nineteenth-century firehouse into his home, and he installed tech-enabled plumbing products in all three of his bathrooms. In short, tech-enabled kitchen and bathroom products are suitable for remodeling a vintage home or building an ultra-modern apartment space.

Jordan Cooper, founder of Whiz Cribs, a Chicago-based “technology concierge” service for real estate developers, says that there’s huge opportunity for professionals in the remodel market. “Retrofitting is the future. There is tremendous demand for remodeling; a recent Trulia study suggests 90% of homeowners plan to remodel their home at some point. What better opportunity than to introduce or add modern technology in the process. In the next five years, no new home will be sold without some element of smart home technology, which will cause even greater demand for the same technology in remodels.”



## Conclusion

Tech-based products in the kitchen and bathroom are only growing in popularity. Kohler is here to provide pros with not only the products themselves but also the resources and expertise to help specify, install and design spaces with smart products in mind.

### What are the next steps?

Learn more about the tech-based kitchen and bathroom products Kohler offers at [SmartHome.KOHLER.com](https://www.kohler.com/SmartHome).

Reach out to your Kohler sales representative for more information.

Go to the Pro Toolbox for resources, tools, training, installation videos and more.

Find a KOHLER® Signature Store or KOHLER showroom to look at the products firsthand. Find a store near you at [KOHLER.com/FindaStore](https://www.kohler.com/FindaStore).

