

2016



U.S. HOUZZ SMART HOME TRENDS STUDY



Big Ideas

Renovated Homes Are Getting Smarter*

Nearly half of homeowners are installing smart systems or devices during their renovation projects (45%), with the average renovating homeowner adding one smart system or device to the home in the course of a renovation. A system or device has a smart capability if it can be monitored and/or controlled from a mobile device (smartphone or tablet) and/or a computer.

Security & Thermostats Top “Smart” Priorities

New smart systems or devices are most likely to appear as part of home security or safety upgrades, followed by entertainment, climate, and lighting upgrades. That said, smart thermostats are the single most popular smart device in a renovated home.

High Satisfaction With Smarter Homes

Homeowners renovating their homes are more likely to report high levels of satisfaction with their new smart upgrades compared to those installing devices without mobile connectivity. Motivations for smart systems differ from those for more conventional technologies. Smart device installers place a greater emphasis on monitoring the home remotely and reducing energy consumption, and a lesser emphasis on improving the home’s resale value.

Professional Help Is Critical For Most Technology Upgrades

The majority of renovating homeowners rely on professional help to install their smart home security, climate control, and lighting gadgets. Similarly, homeowners upgrading these systems without smart features also turn to pros for installation help. Small streaming-entertainment upgrades require the least amount of professional involvement.

*Systems or devices are defined as “smart” if they have the capability to be monitored and/or controlled from a mobile device and/or computer.

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At a Glance: Smart Technology Upgrades

	Top Considerations in Smart* Technology Adoption		
Overall adoption (among renovating homeowners)	Installed during renovation: At least one smart device 45%	Before renovation: Number of smart devices 0.4	After renovation: Number of smart devices 1.4
Home security upgrades (among renovating homeowners)	Installed during renovation: At least one smart device 25%	Top reason to install:** Protecting home from intruders 67%	Spend: Exceeding \$1,500 24%
Home entertainment upgrades (among renovating homeowners)	Installed during renovation: At least one smart device 18%	Top reason to install:** Improving entertainment experience 80%	Spend: Exceeding \$1,500 52%
Home climate controls upgrades (among renovating homeowners)	Installed during renovation: At least one smart device 14%	Top reason to install:** Improve home comfort 71%	Spend: Exceeding \$1,500 50%
Home lighting upgrades (among renovating homeowners)	Installed during renovation: At least one smart device 12%	Top reason to install:** Reduce energy consumption 59%	Spend: Exceeding \$1,500 53%
Top installed devices (among renovating homeowners)	Smart thermostats 12%	Smart alarms 9%	Smart cameras 9%
Top challenges in adoption (among renovators upgrading with smart features)	Educating self about options 38%	Finding the right products/technology 37%	Staying on budget 27%
Top reasons to not install (among renovators that did not install but considered smart upgrades)	Just not interested 37%	Too expensive/pricy 31%	Concerns about privacy 23%

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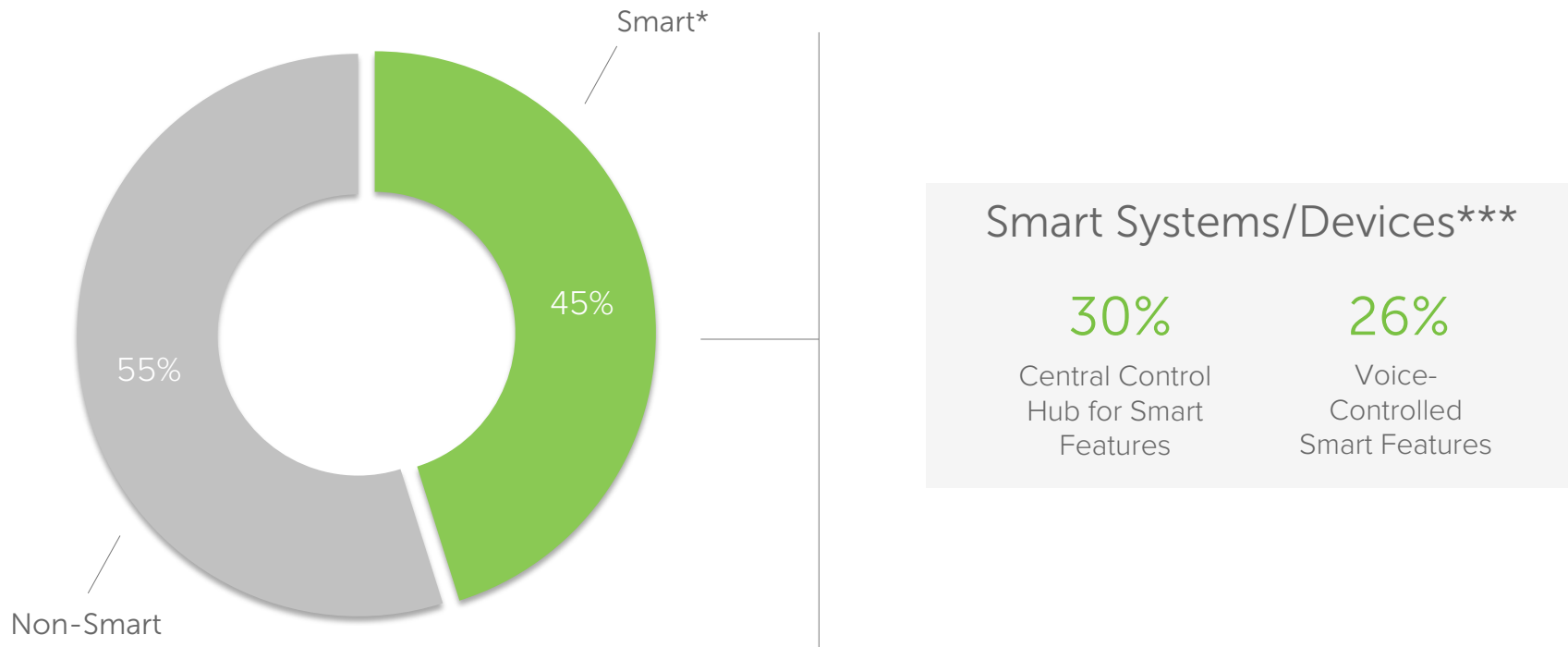
**Percentages reflect proportion of homeowners who are *upgrading with at least one smart feature (“smart upgrades”)* in security, entertainment, climate control or lighting, respectively, as part of their completed, current, or planned renovation.

Popularity

“Smart” Renovations

Nearly half of renovating homeowners are incorporating smart systems or devices during their renovation projects (45%). A system or device has smart capability if it can be monitored and/or controlled from a mobile device (smartphone or tablet) and/or a computer. Nearly a third of these smart systems or devices are controlled from a central control hub or app (30%) and a quarter are voice-controlled (26%).

SMART* VS. NON-SMART UPGRADES IN HOME RENOVATIONS**



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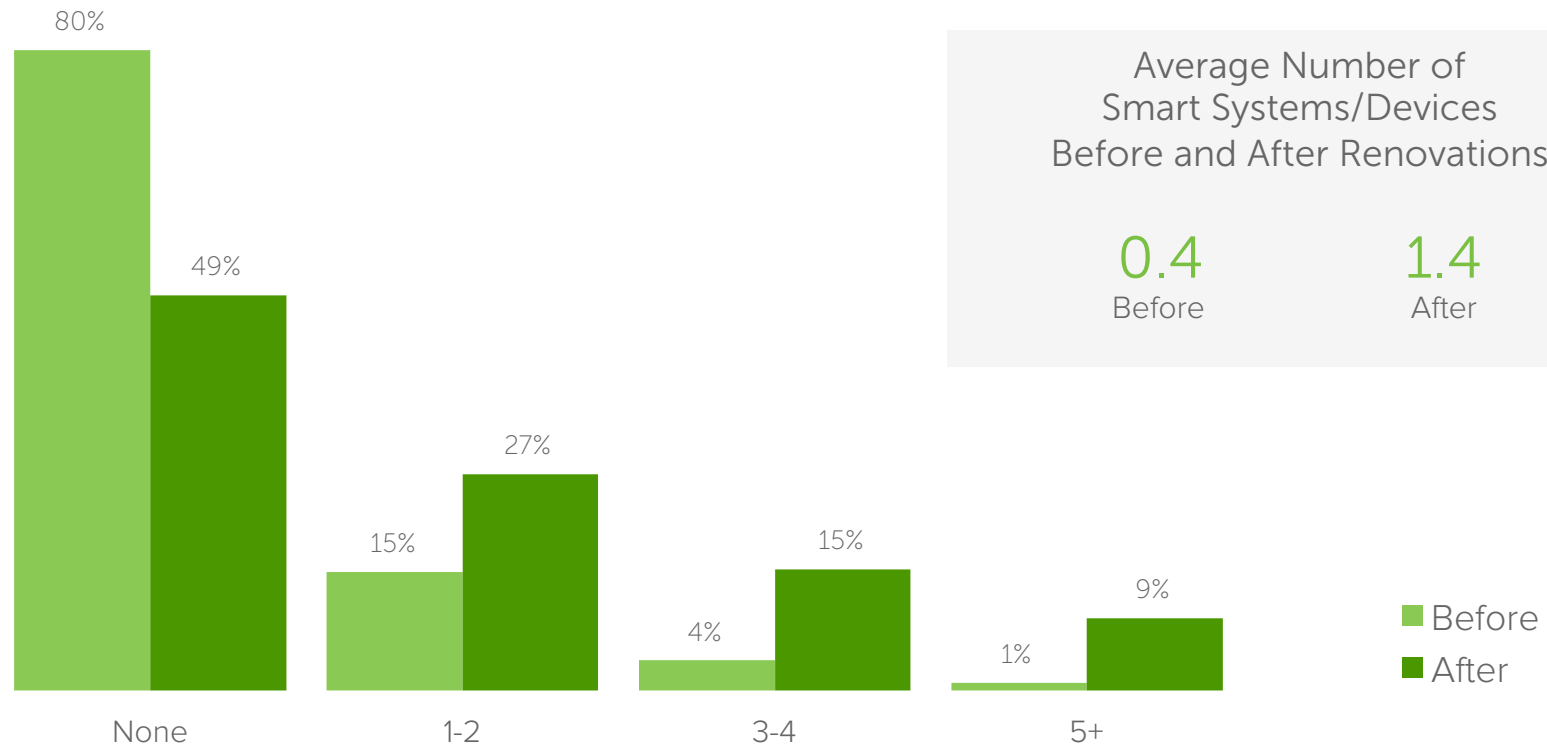
**Percentages reflect proportion of homeowners who have completed, are currently working on, or are planning a renovation project.

***Percentage reflects proportion of homeowners who are *upgrading with “smart” features* as part of their completed, current, or planned renovation.

A More Connected Home

The average renovating homeowner adds one smart system or device to the home in the course of renovation. In fact, renovated homes are more than twice as likely to include a smart system or device following a renovation than before a renovation (51% vs. 20%, respectively). One in ten renovated homes has five or more smart devices after a renovation.

UPGRADED SMART* HOME SYSTEMS OR DEVICES**



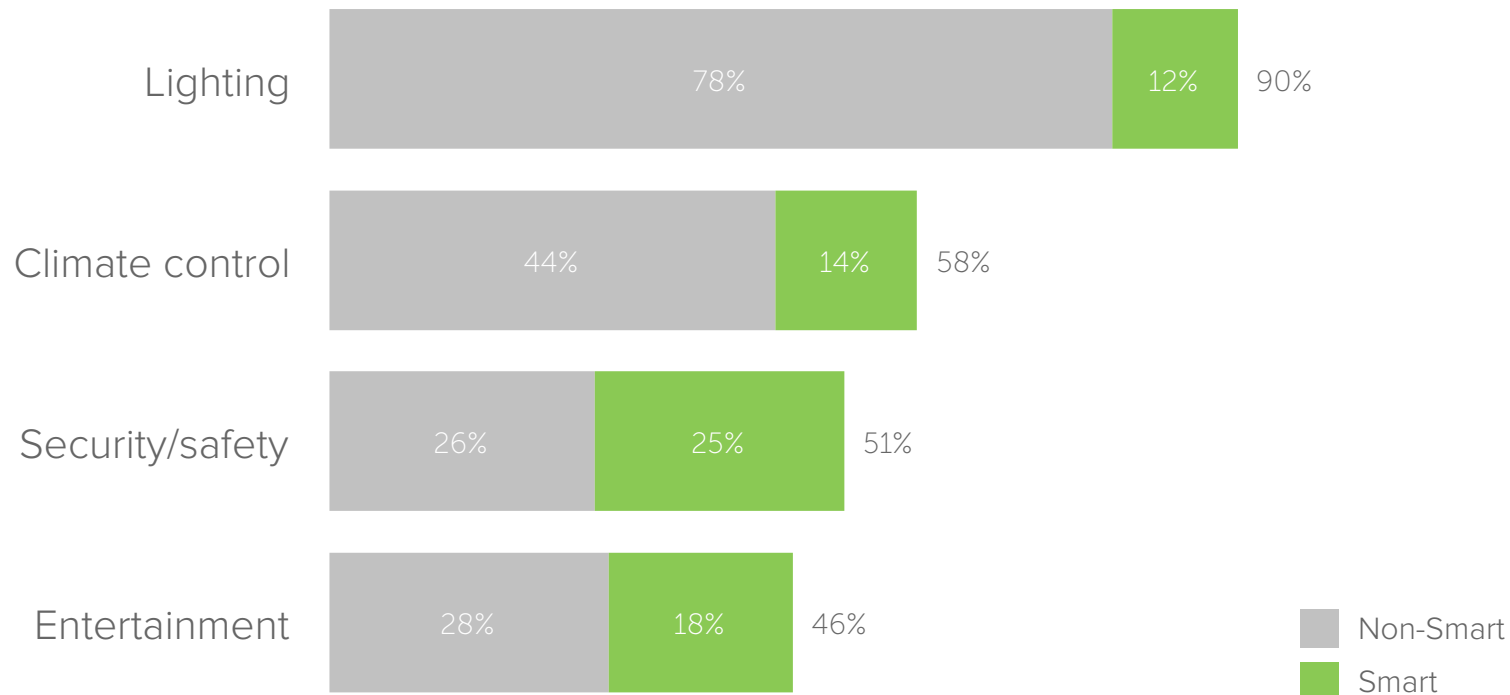
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Keeping Homes Secure the “Smart” Way

New smart systems or devices are most likely to appear in home security or safety upgrades, followed by entertainment, climate, and lighting upgrades. Specifically, a quarter of renovating homeowners report installing at least one smart system or device as part of home security upgrades (25%), compared to nearly a fifth who install at least one smart entertainment device (18%). While lighting is the most common upgrade among renovating homeowners (90%), only 12% install a smart lighting feature.

SMART* VS. NON-SMART SYSTEM UPGRADES**



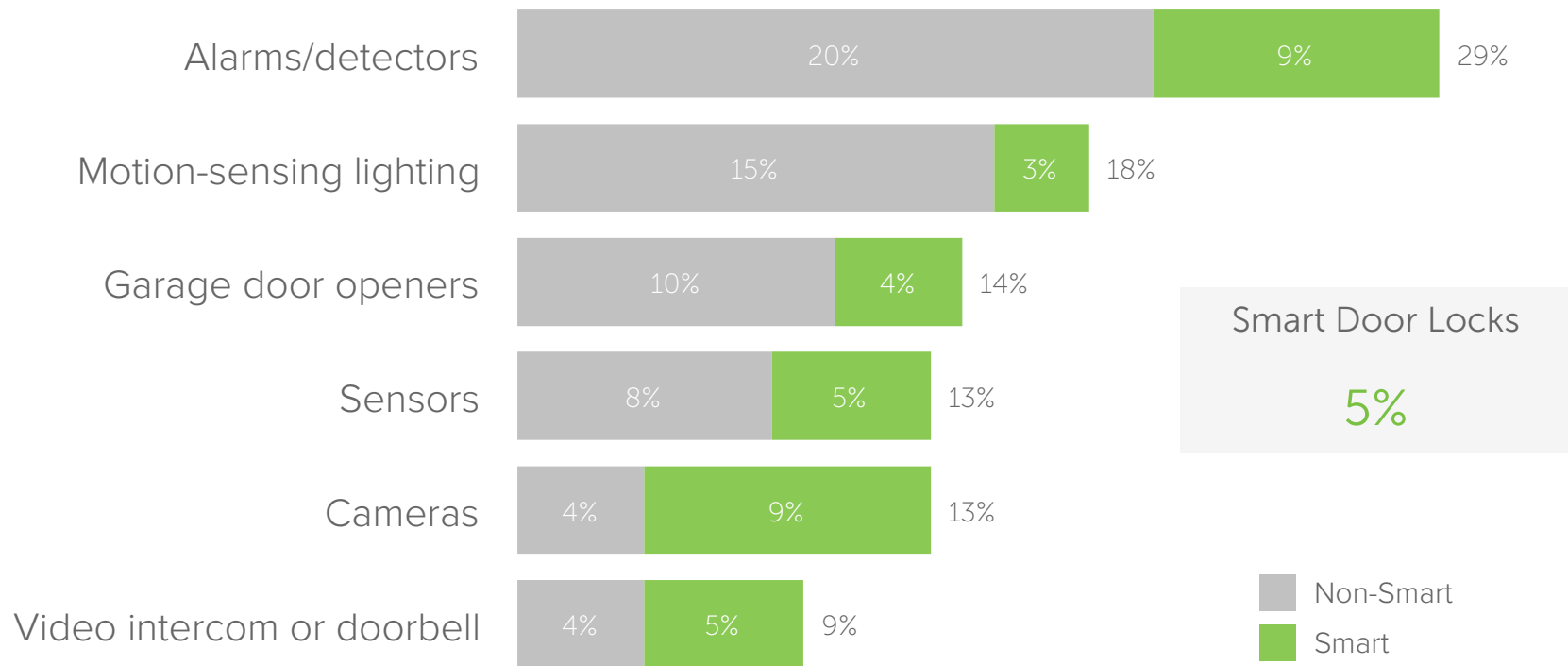
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Prioritizing “Smart” Alarms and Cameras

When it comes to home security and safety upgrades, alarms and/or detectors for hazards, such as fire and carbon monoxide, and cameras are the most likely to have smart capabilities, installed by nearly one in ten renovating homeowners each (9%). In fact, cameras with mobile or computer connectivity are twice as likely to be installed than those without it (9% vs. 4%, respectively). One in 20 renovating homeowners opt for smart sensors for motion; broken glass or a broken door; smart door locks; and/or smart video doorbells (5% each).

SMART* VS. NON-SMART SECURITY OR SAFETY DEVICES**



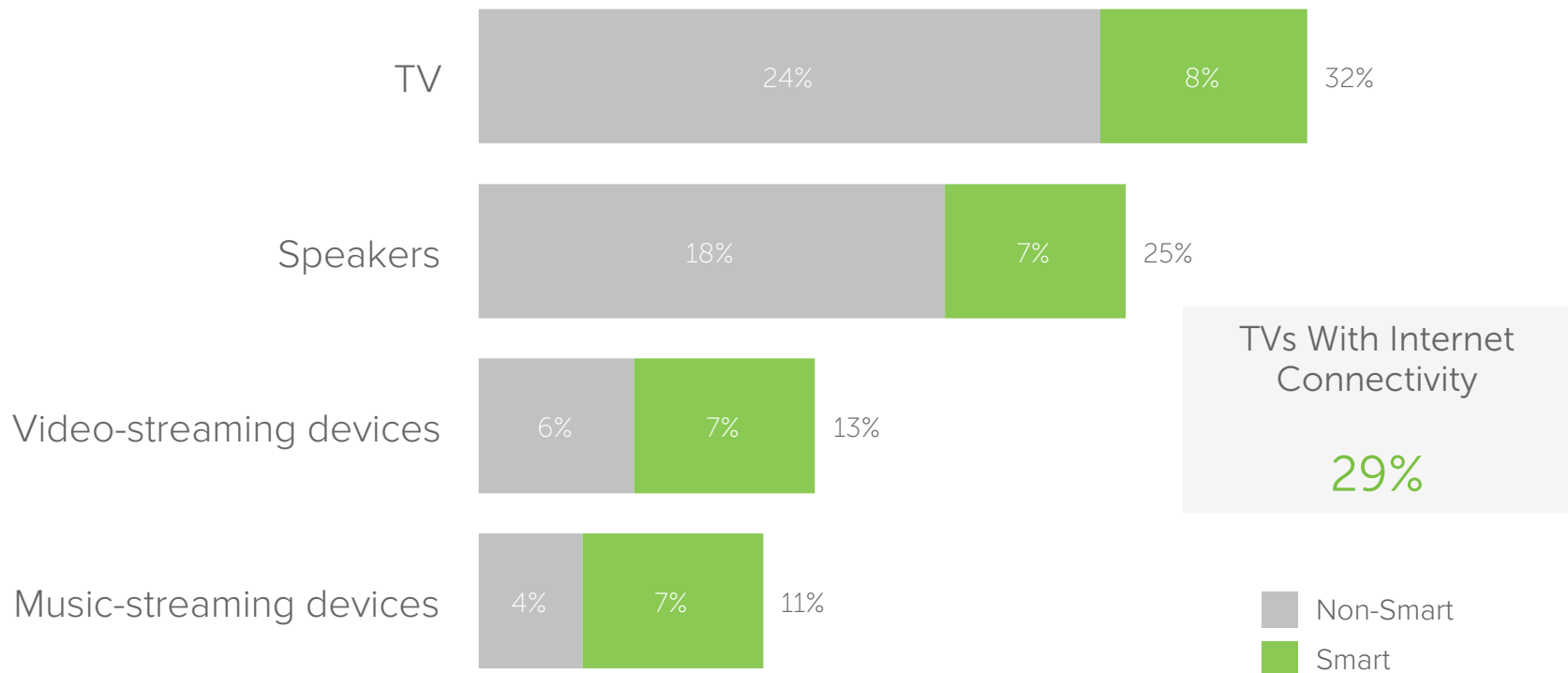
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Smarter Entertainment

Many new TVs, speakers, and video- or music-streaming devices installed during a renovation are smart, as reported by 7%-8% of renovating homeowners. Furthermore, video-streaming devices (Apple TV, Roku, etc.) and music-streaming devices (e.g., for Spotify, Pandora, etc.) are more likely to be smart than non-smart.

SMART* VS. NON-SMART ENTERTAINMENT DEVICES**



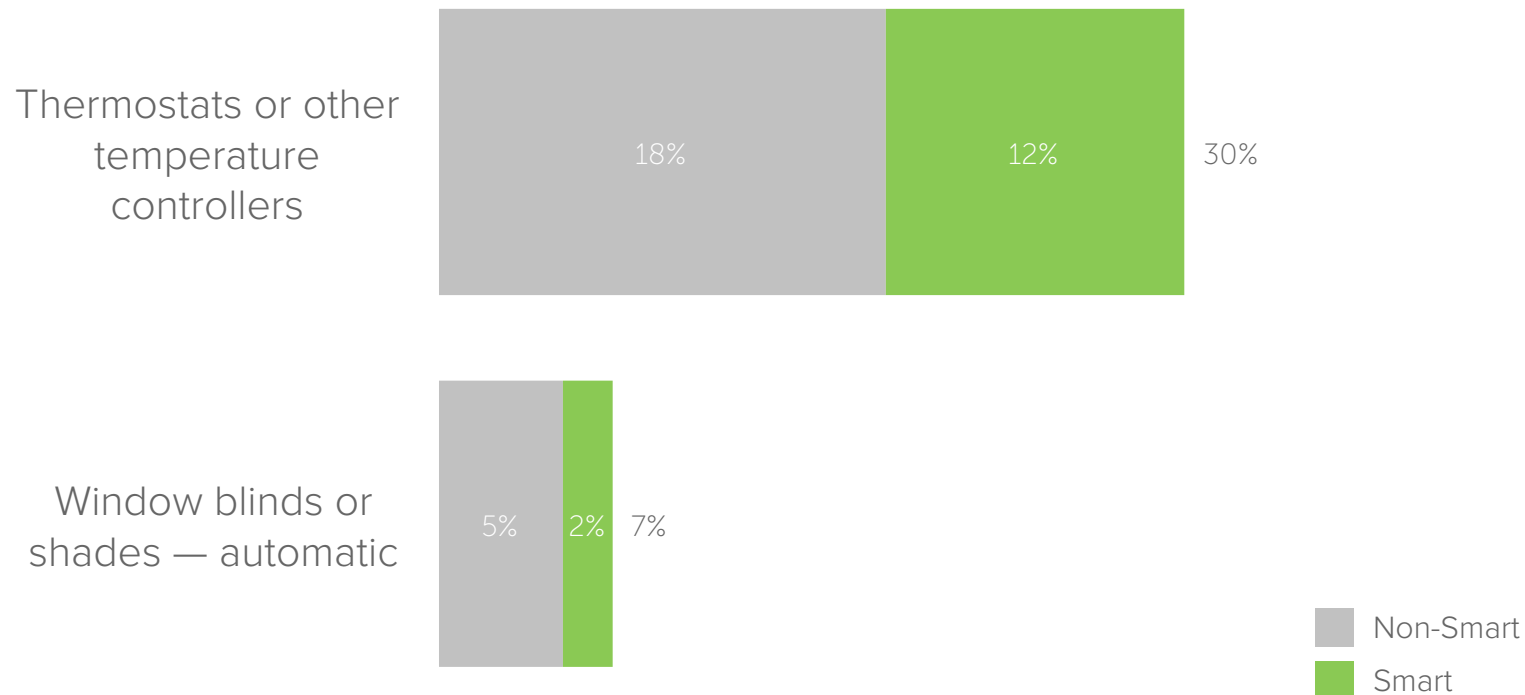
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**Percentages reflect proportion of homeowners who have completed, are currently working on, or are planning a renovation project.

“Smart” Thermostats Top the List

Among all the devices with smart capabilities installed by renovating homeowners, smart thermostats are the most popular, installed by 12% of renovating homeowners. In fact, nearly half of new thermostats installed during 2015-2016 renovations have smart capabilities. While automated window treatments are still not very common, those with smart features can be found in 2% of renovated homes.

SMART* VS. NON-SMART CLIMATE-CONTROL DEVICES**



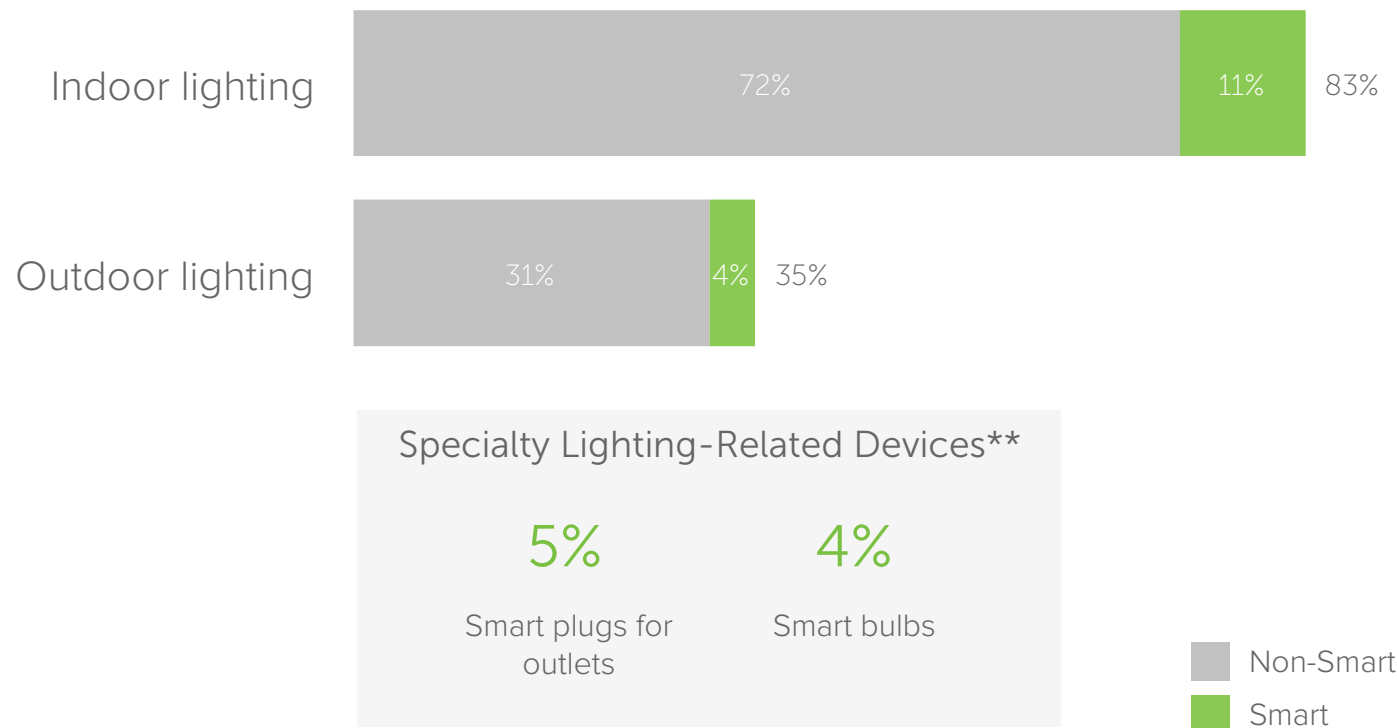
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**Percentages reflect proportion of homeowners who have completed, are currently working on, or are planning a renovation project.

“Smarter” Indoors Than Outdoors

Indoor lighting is nearly three times as likely to have smart features than outdoor lighting (11% vs. 4%, respectively). Lighting systems with smart features may include outlets, dimmers and/or switches, control panels, and other elements with mobile and/or computer connectivity. Specialty smart plugs for outlets and smart bulbs that do not require rewiring can each be found in roughly one in 20 renovated homes (5% and 4%, respectively).

SMART* VS. NON-SMART LIGHTING**



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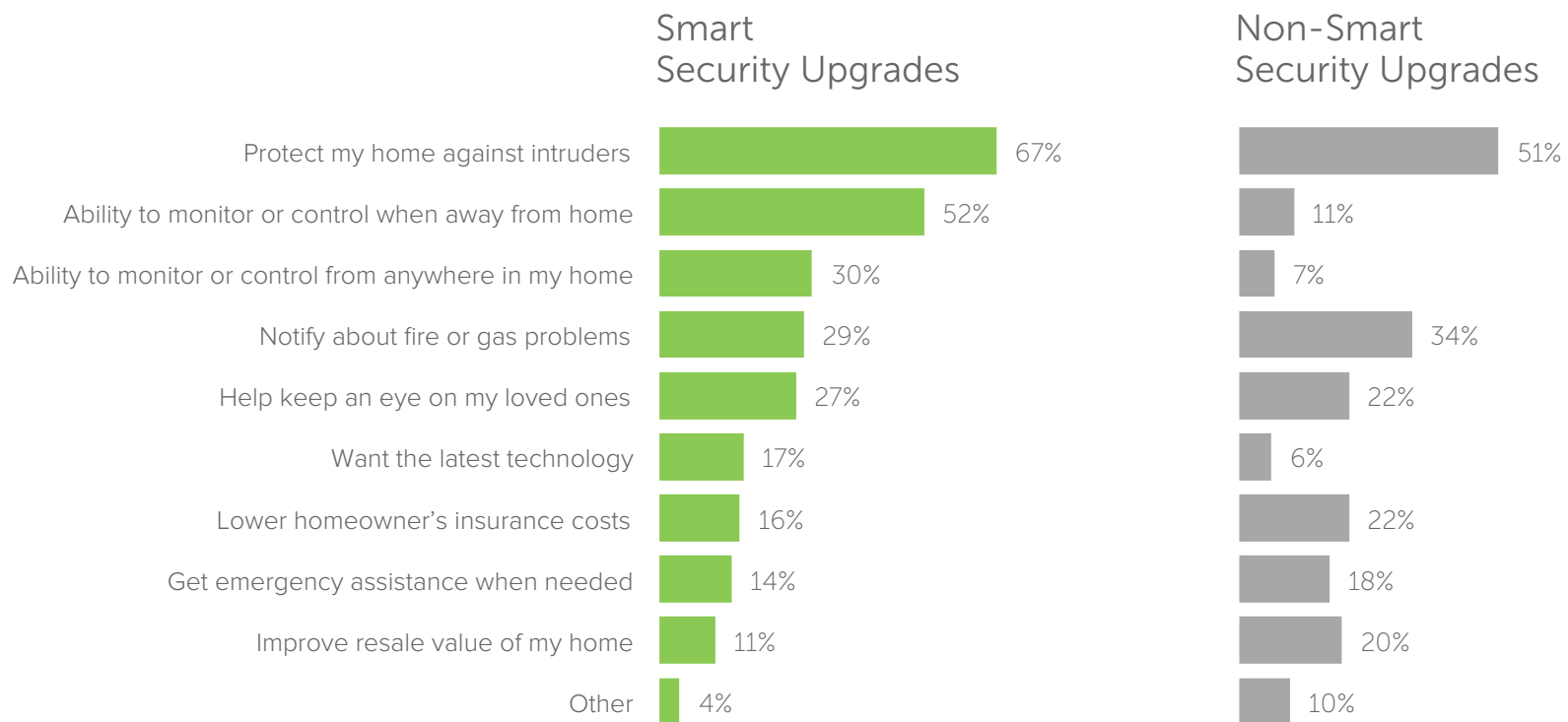
**Percentages reflect proportion of homeowners who have completed, are currently working on, or are planning a renovation project.

Motivations

Motivated to Protect and Monitor Their Homes

Homeowners upgrading their home security or safety systems cite protection from intrusion as the No. 1 reason for these upgrades. Those opting for smart security devices are more likely to be driven by this motivation than those going after more conventional upgrades (67% vs. 51%, respectively). Seeking the freedom to monitor or control their home security remotely or from anywhere in the home is a big motivating factor for those adopting smart security upgrades.

REASONS FOR INSTALLING SMART* VS. NON-SMART SECURITY OR SAFETY UPGRADES**



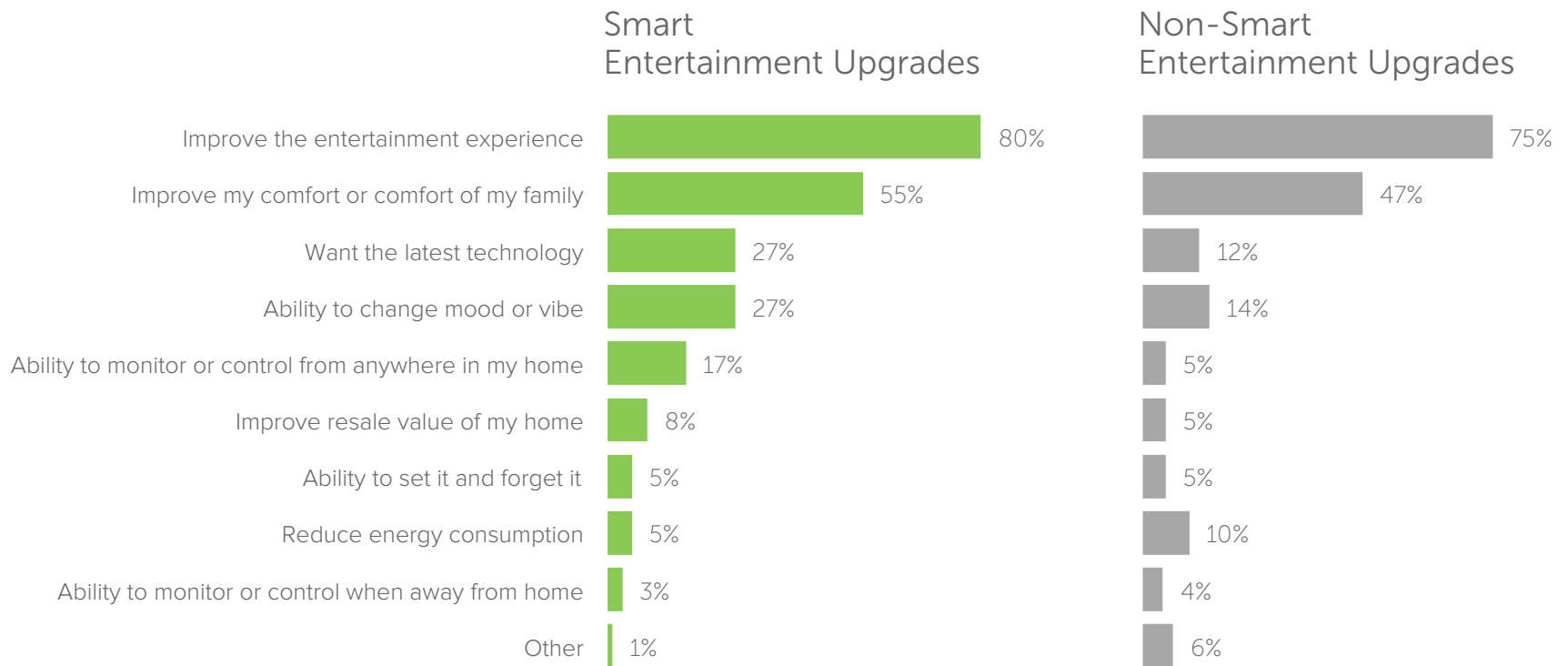
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**Percentages reflect proportion of homeowners who are upgrading security/safety with at least one smart feature ("smart upgrades") or no smart features ("non-smart upgrades") as part of their completed, current, or planned renovation.

A Better Entertainment Experience

Renovating homeowners upgrading to smart entertainment systems and devices seek an improved entertainment experience and more comfort to a somewhat greater extent than those installing more conventional entertainment options. Similar to smart home security adopters, smart entertainment technology adopters seek the flexibility of changing the home’s vibe and controlling sound from anywhere in the home (27% and 17%, respectively).

REASONS FOR INSTALLING SMART* VS. NON-SMART ENTERTAINMENT UPGRADES**



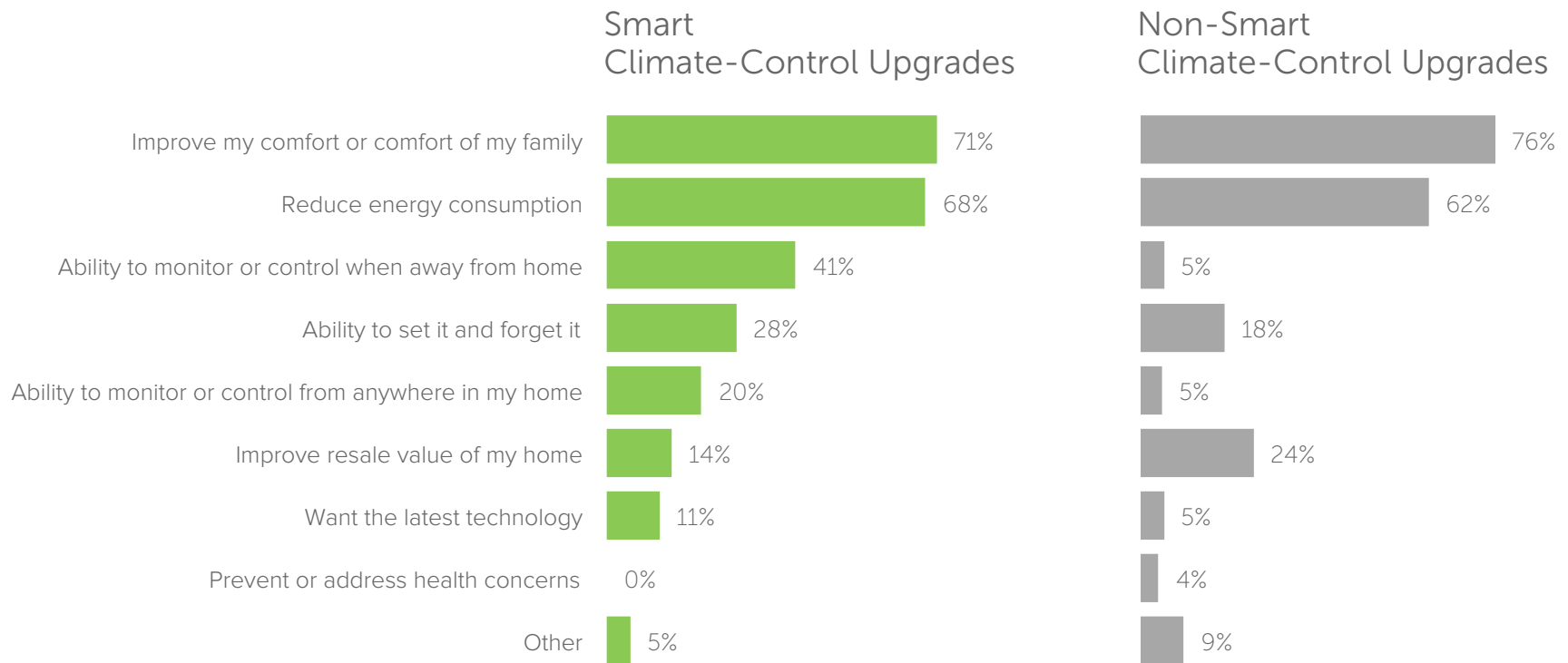
*Systems or devices are defined as “smart” if they have the capability to be monitored and/or controlled from a mobile device and/or computer.

**Percentages reflect proportion of homeowners who are *upgrading entertainment with at least one smart feature (“smart upgrades”) or no smart features (“non-smart upgrades”)* as part of their completed, current, or planned renovation.

Improving Energy Usage and Remote Monitoring

Upgrades to climate controls are all about improving comfort. Reducing energy consumption is a close second in importance, especially among those upgrading to smart devices such as thermostats (68% vs. 62%, respectively). Additionally, smart climate controls are more attractive than conventional alternatives for providing the convenience of remote access (41% vs. 5%, respectively) and/or having automated settings (28% vs. 18%, respectively).

REASONS FOR INSTALLING SMART* VS. NON-SMART CLIMATE-CONTROL UPGRADES**



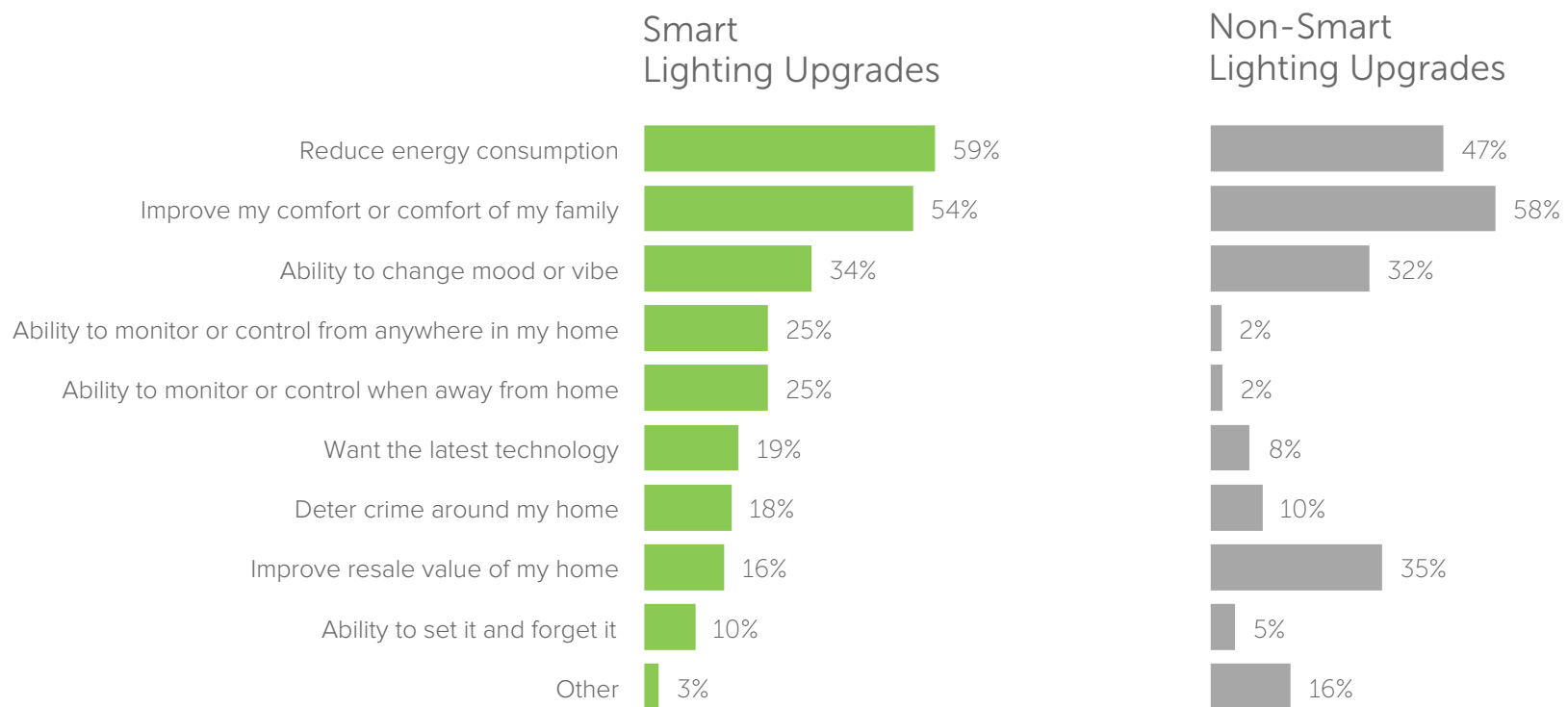
*Systems or devices are defined as “smart” if they have the capability to be monitored and/or controlled from a mobile device and/or computer.

**Percentages reflect proportion of homeowners who are *upgrading climate-control with at least one smart feature (“smart upgrades”)* or *no smart features (“non-smart upgrades”)* as part of their completed, current, or planned renovation.

Not About Resale Value

Reducing energy consumption is an important reason for upgrading to smart lighting devices, especially when compared to more conventional alternatives (59% vs. 47%, respectively). Furthermore, smart lighting adopters are significantly more likely to focus on personal motivations such as the desire for flexibility in monitoring, the latest technology, and/or crime prevention (25%, 19%, and 18%, respectively). In contrast, those upgrading to more conventional alternatives are twice as likely to seek to improve the home's resale value (35%).

REASONS FOR INSTALLING SMART* VS. NON-SMART LIGHTING UPGRADES**



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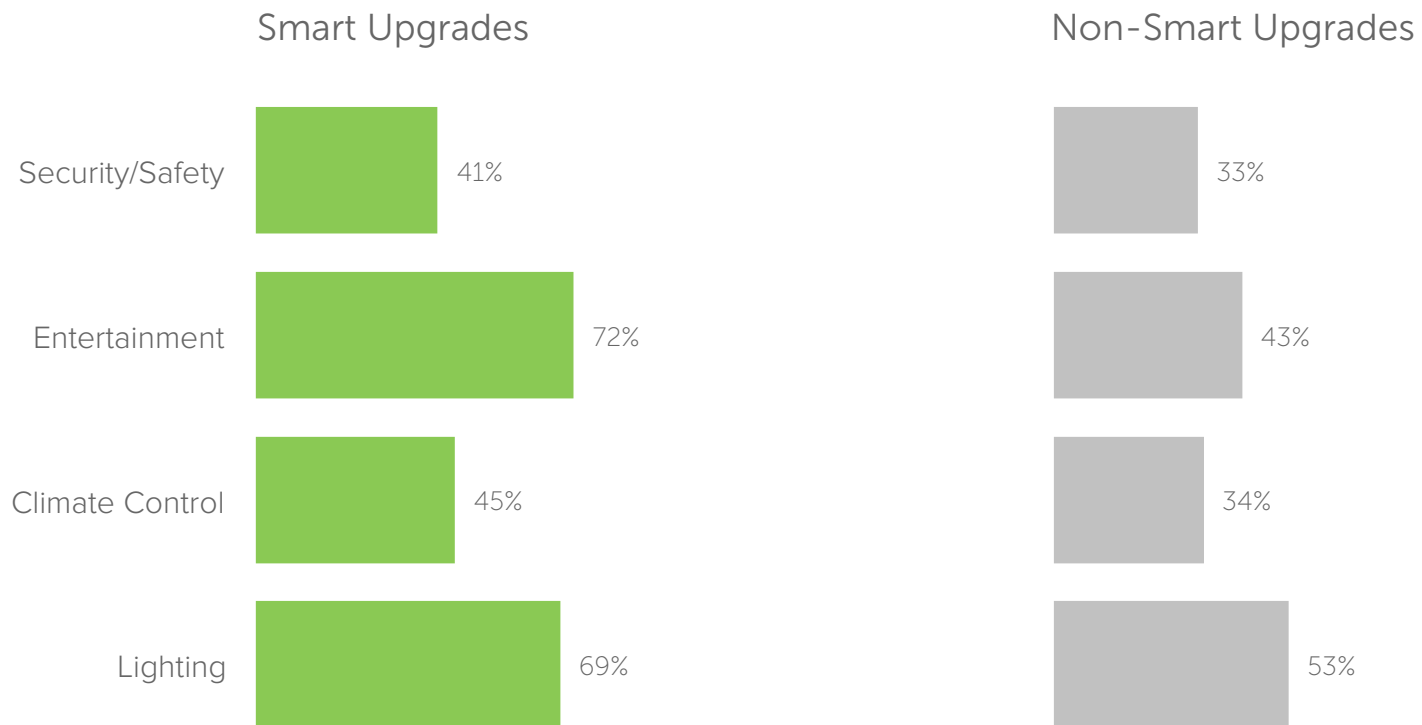
**Percentages reflect proportion of homeowners who are *upgrading lighting with at least one smart feature (“smart upgrades”)* or *no smart features (“non-smart upgrades”)* as part of their completed, current, or planned renovation.

Satisfaction, Challenges & Barriers to Adoption

More Satisfied With Smart Tech

Homeowners renovating their homes are more likely to report high levels of satisfaction with their new smart security, entertainment, climate-control, and/or lighting systems and devices compared to those installing devices without mobile connectivity. This is particularly true for entertainment-related upgrades; homeowners are 1.5 times more likely to report being “very satisfied” with upgrades including smart features than those with non-smart features (72% vs. 43%, respectively).

“VERY SATISFIED” RATING FOR SMART* VS. NON-SMART SYSTEMS/DEVICES (5-POINT RATING SCALE)**



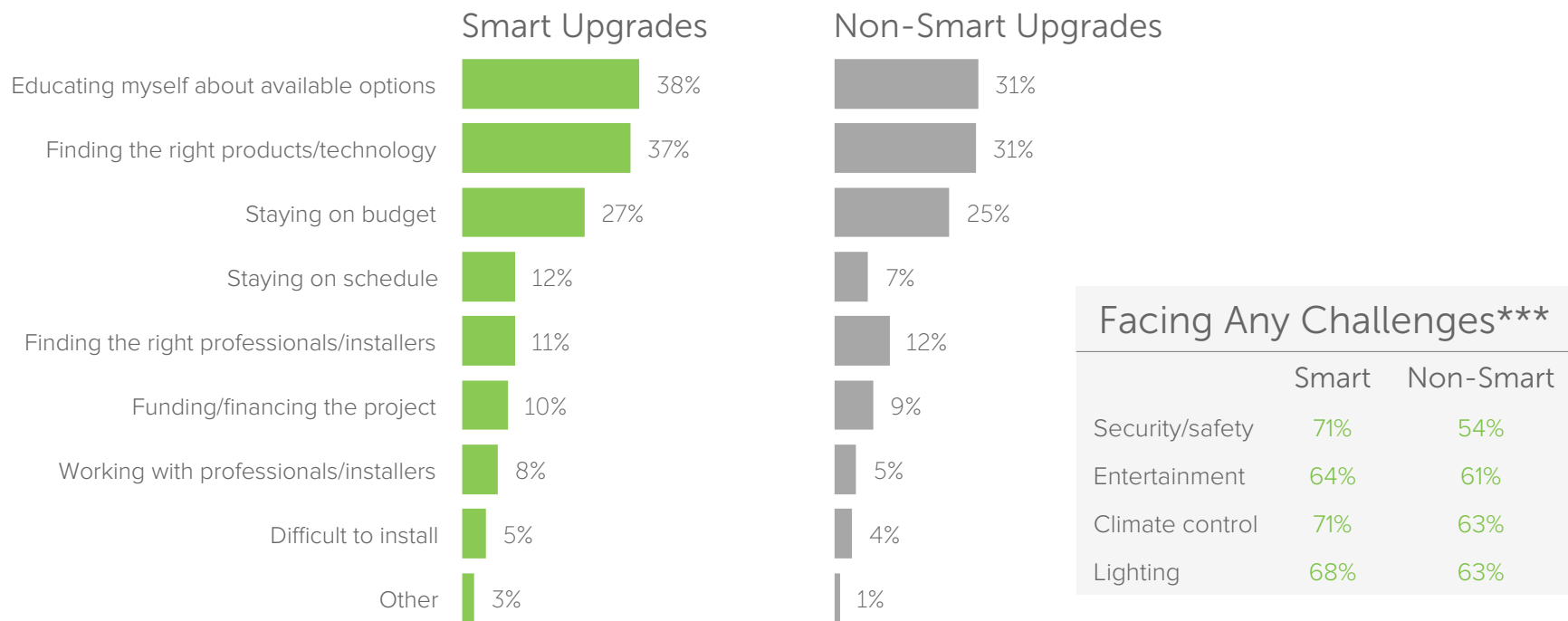
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**Percentages reflect proportion of homeowners who have completed, are currently working on, or are planning a renovation project.

Product Selection Remains the Biggest Challenge

Homeowners cite learning about and finding the right technologies as the biggest challenges when installing security, entertainment, climate-control, or lighting systems and devices. This is especially true when these technologies include smart features. Sticking to the initial budget is also an important challenge and more likely to be a factor with smart technologies.

CHALLENGES WITH INSTALLING SMART* VS. NON-SMART DEVICES**



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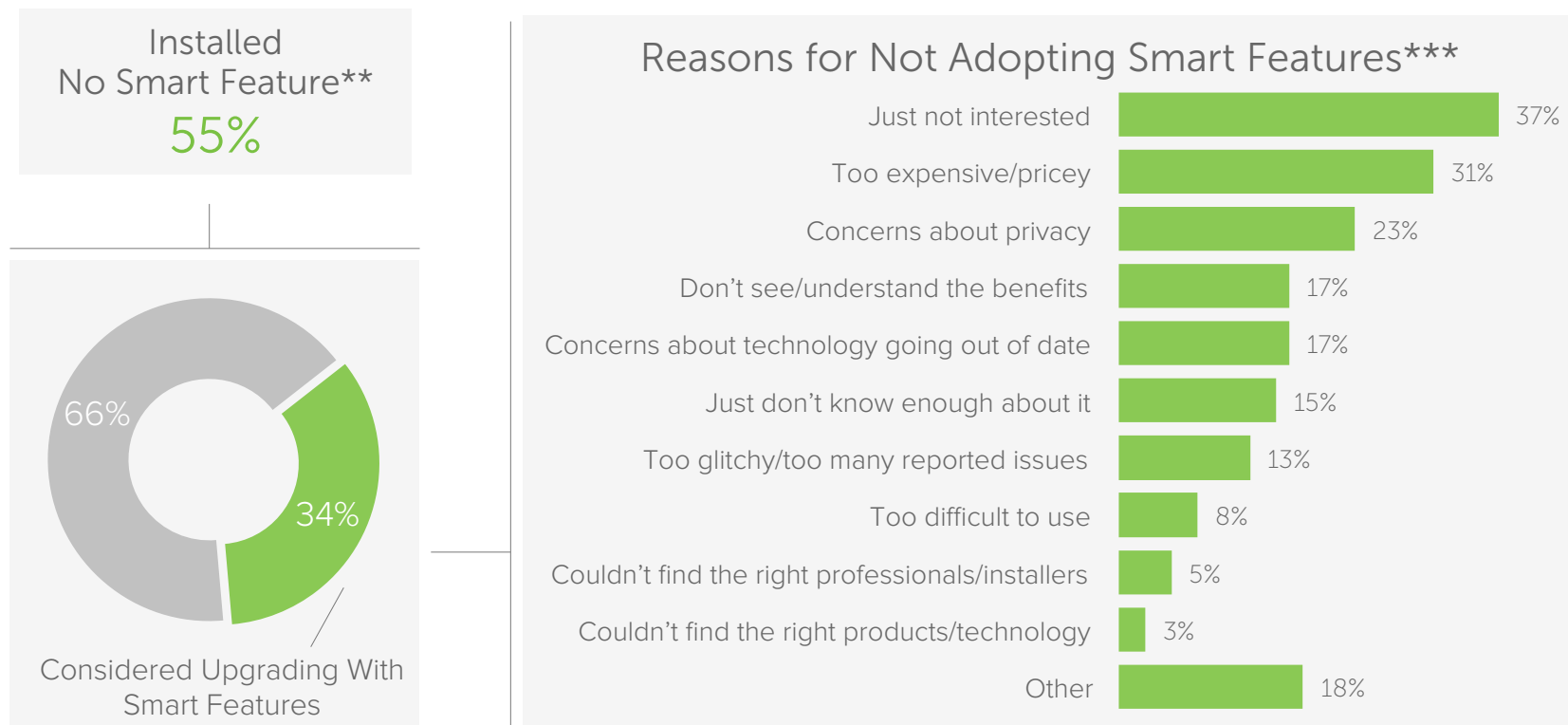
**Percentages reflect proportion of homeowners who are *upgrading security, entertainment, climate-control, or lighting features* as part of their completed, current, or planned renovation.

***See Appendix A for details.

Thanks, But No Thanks

Over half of renovating homeowners are opting against any smart security/safety, lighting, climate-control, or entertainment systems/devices (55%). Among these non-adopters, a third gave the technologies some consideration (34%) but ultimately decided not to pursue due to, lack of interest (37%), cost (31%), or concerns about privacy (23%).

REASONS FOR NOT ADOPTING SMART* FEATURES DURING UPGRADES



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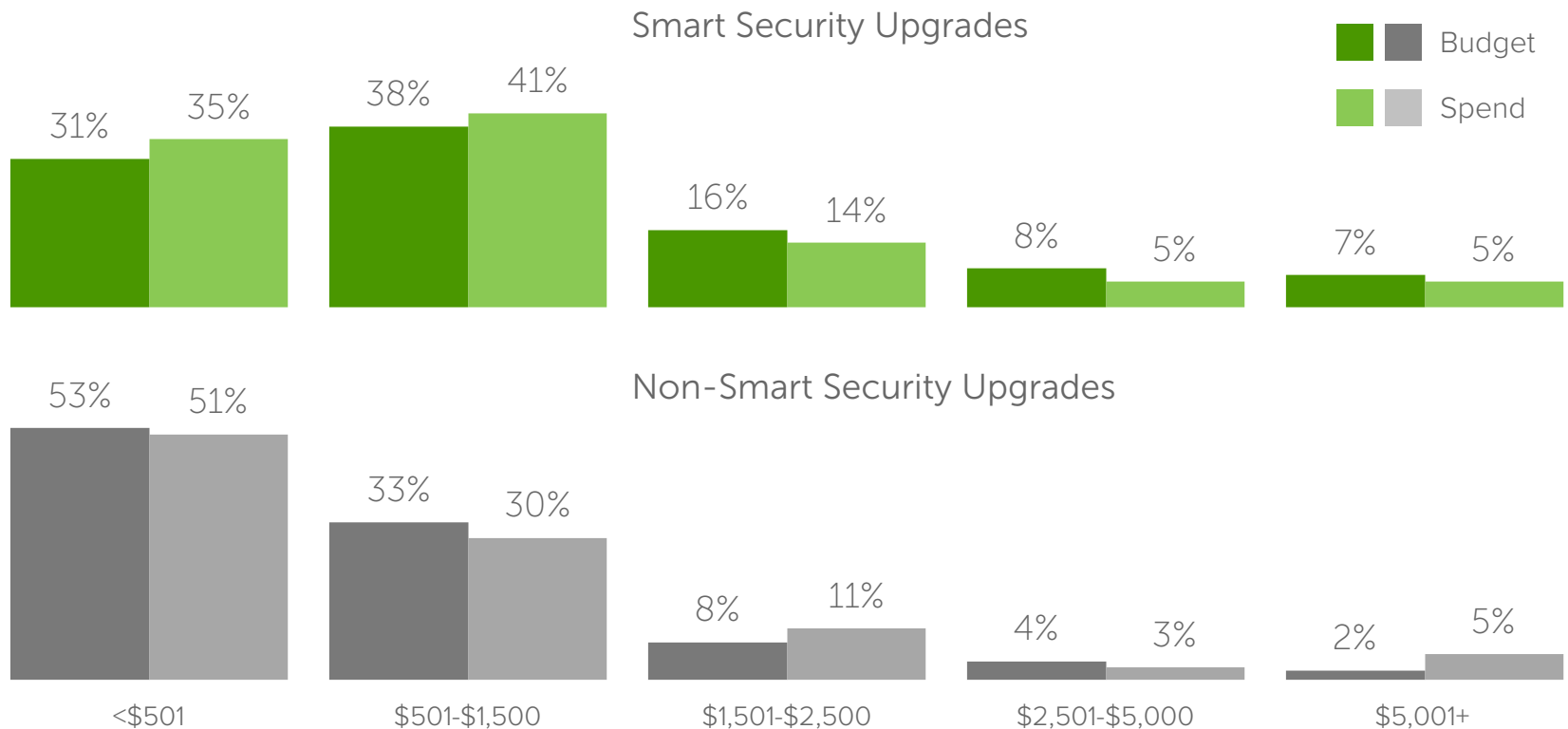
***Percentages reflect proportion of renovating homeowners who didn't upgrade with any “smart” features but considered doing so.

Budget & Spend

Security Upgrades Under \$1,500

Homeowners making security or safety upgrades during home renovations spend somewhat more on technologies in which at least one device is smart compared to those who choose more conventional alternatives. Specifically, only a third of renovating homeowners spend and budget \$500 or less for smart security, compared to half who spend and budget this much on non-smart systems. The majority of upgraders spend less than \$1,501 on their security upgrades, with only 5% spending in excess of \$5,000.

BUDGET AND SPEND FOR SMART* VS. NON-SMART SECURITY OR SAFETY DEVICES**



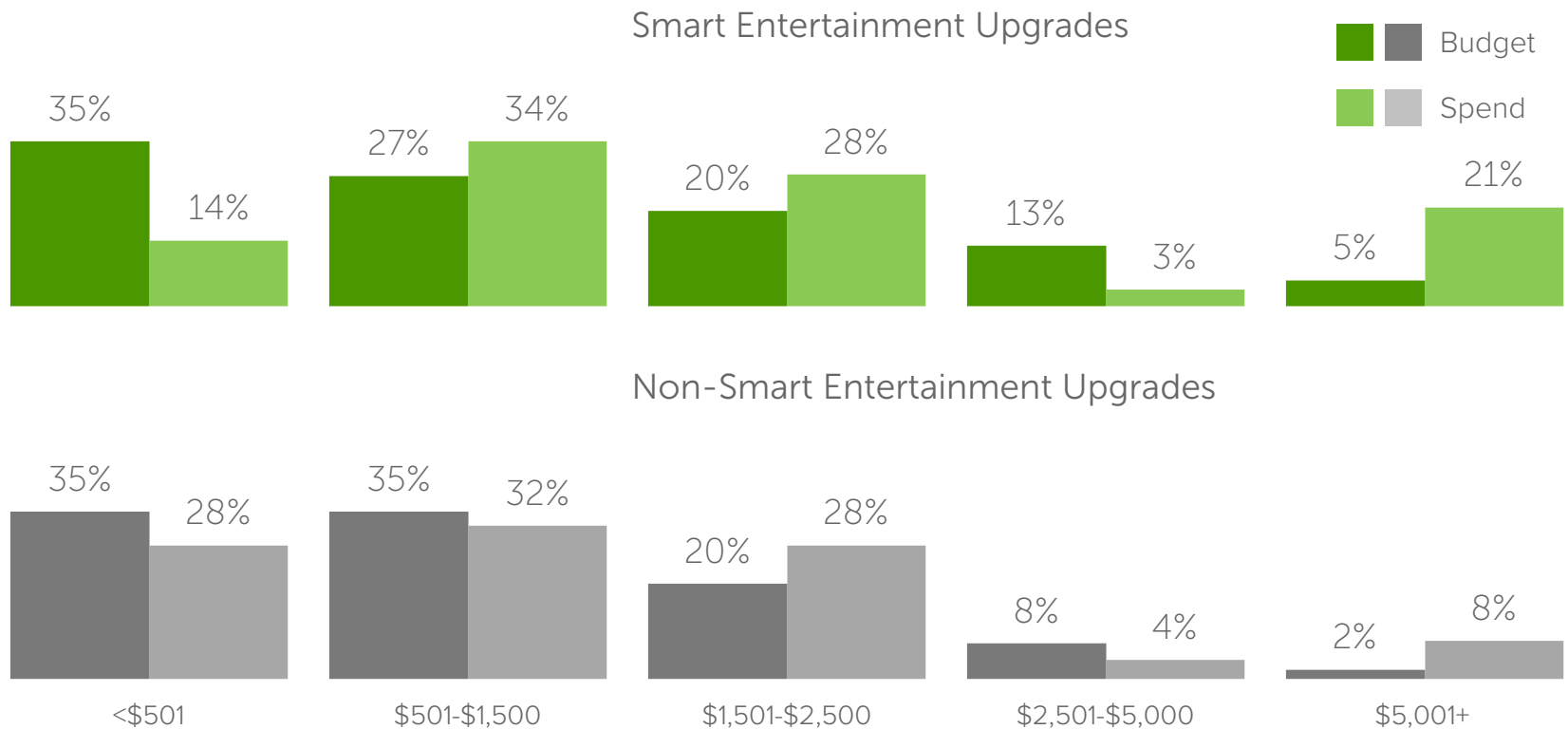
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**Percentages reflect proportion of homeowners who are upgrading security/safety features as part of their completed, current, or planned renovation.

Entertainment for Every Budget

In contrast to security upgrades, those installing new entertainment systems report not only a greater variability in costs, but also a large discrepancy between initial budget and actual spend. This is especially true for entertainment upgrades that include at least one smart technology. For example, a fifth of homeowners who opted for smart entertainment spent in excess of \$5,000, compared to only 5% who budgeted this much and 2%-8% who budgeted or spent this much on more conventional entertainment alternatives.

BUDGET AND SPEND FOR SMART* VS. NON-SMART ENTERTAINMENT DEVICES**



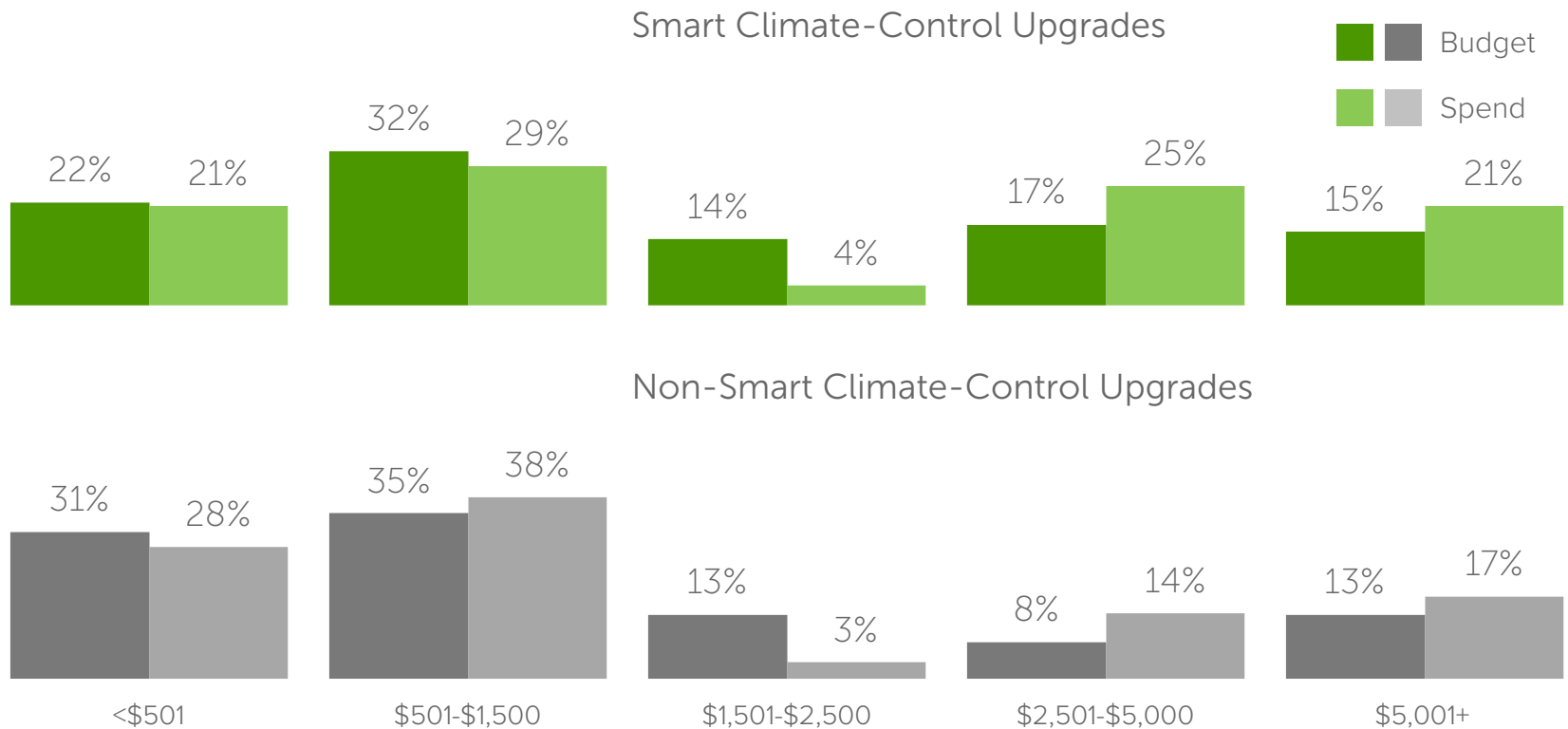
*Systems or devices are defined as "smart" if they have the capability to be monitored and/or controlled from a mobile device and/or computer.

**Percentages reflect proportion of homeowners who are upgrading entertainment features as part of their completed, current, or planned renovation.

Climate Controls and the \$1,000 Doughnut Hole

Irrespective of smart or conventional alternatives, renovating homeowners rarely spend in the \$1,501-\$2,500 range on climate controls. Instead, spending tends to fall below or above this range. When it comes to smart climate controls, such as thermostats and automatic window treatments, half of renovating homeowners report spending under \$1,501, and another half spend more than \$2,500 (50% and 46%, respectively). Spending on conventional systems more frequently falls below \$1,501 (66%).

BUDGET AND SPEND FOR SMART* VS. NON-SMART CLIMATE-CONTROL DEVICES**



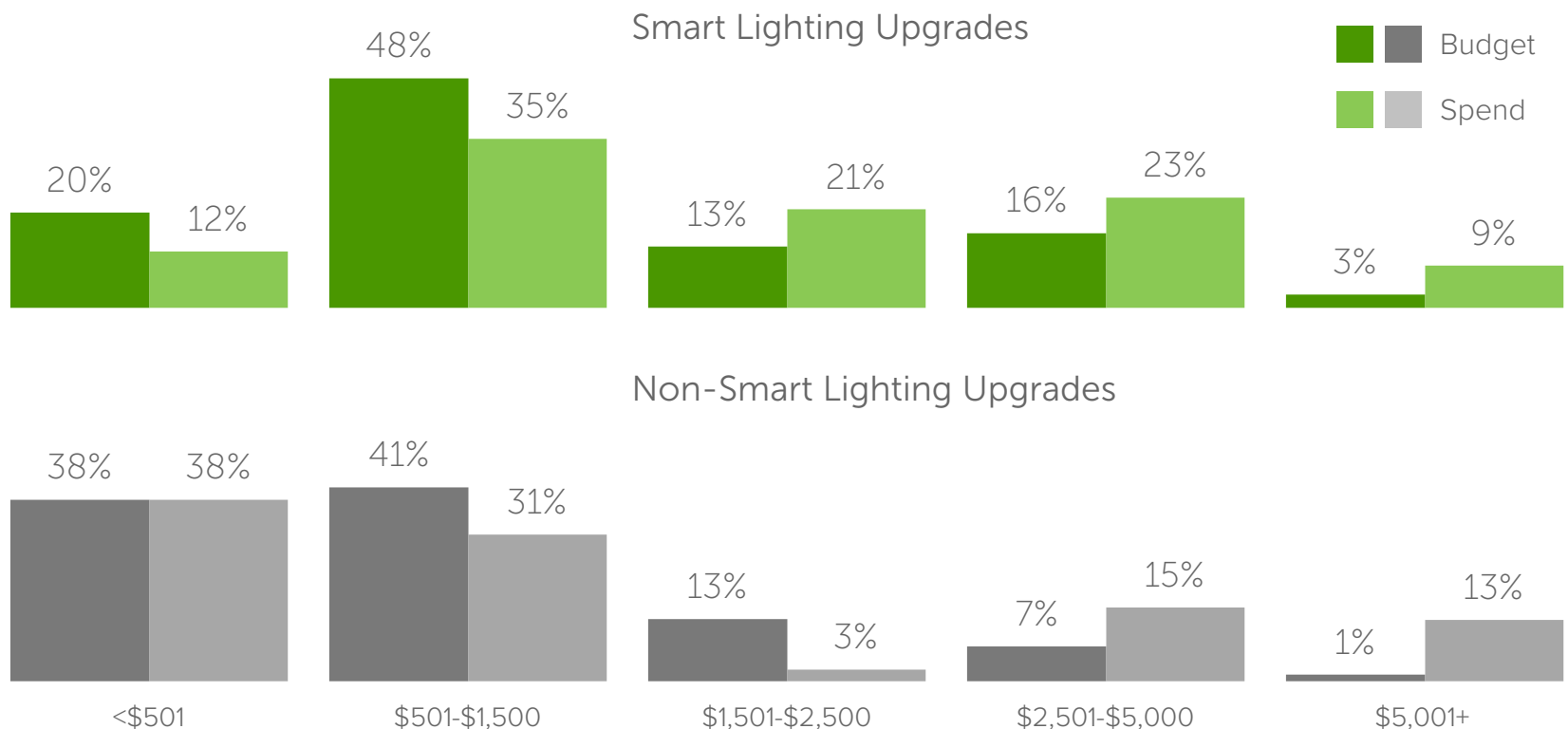
*Systems or devices are defined as "smart" if they have the capability to be monitored and/or controlled from a mobile device and/or computer.

**Percentages reflect proportion of homeowners who are *upgrading climate-control features* as part of their completed, current, or planned renovation.

A Lighting Budget Gap

Homeowners upgrading lighting during home renovations spend more on the upgrades than they initially budget, especially if the lighting upgrades include at least one smart feature. For example, more than half of smart lighting upgraders spend over \$1,500, compared to only a third who budget in this cost range (53% vs. 32%, respectively). In contrast, only a third of non-smart lighting upgraders spend in excess of \$1,500, compared to a fifth who budget this much (31% vs. 21%, respectively).

BUDGET AND SPEND FOR SMART* VS. NON-SMART LIGHTING DEVICES**



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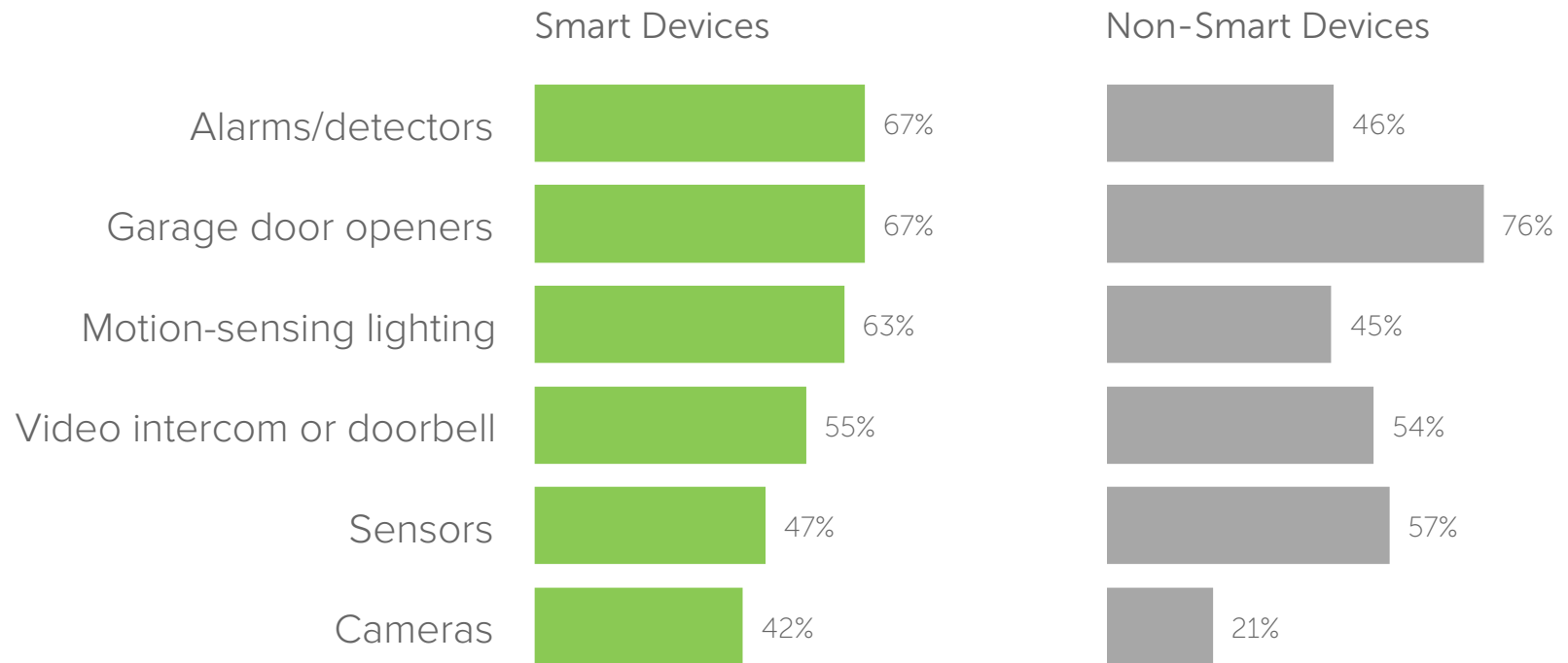
**Percentages reflect proportion of homeowners who are upgrading lighting features as part of their completed, current, or planned renovation.

Pro Hiring

Higher Pro Demand for “Smart” Technologies

Homeowners renovating their homes rely extensively on professional help when it comes to upgrading home security and safety features. Some security elements, such as garage door openers, video doorbells, and motion or glass-break sensors, require professional involvement whether or not the technology is smart. Gas and fire alarms, security lighting, and cameras are more likely to seek professional help when they come with smart features compared to more conventional alternatives.

PROFESSIONAL INSTALLATION OF SMART* VS. NON-SMART SECURITY OR SAFETY DEVICES**



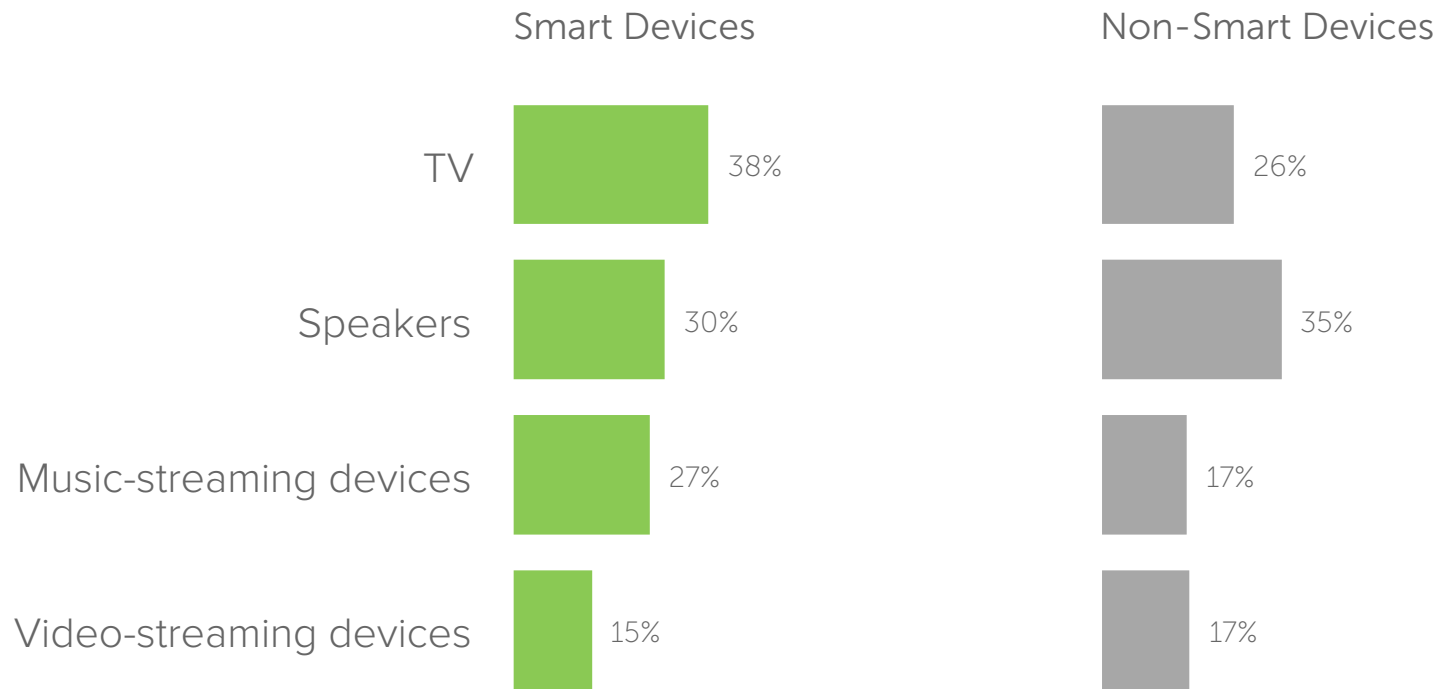
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**Percentages reflect proportion of homeowners who are *upgrading security/safety features* as part of their completed, current, or planned renovation.

Greater DIY Entertainment Installation

Renovating homeowners upgrading entertainment systems/devices enlist professional help to a lesser extent than those upgrading security or safety systems. Interestingly, TVs and music-streaming devices with smart features are more likely to require professional installation (38% and 27%, respectively) than those without smart capabilities (26% and 17%, respectively).

PROFESSIONAL INSTALLATION OF SMART* VS. NON-SMART ENTERTAINMENT DEVICES**



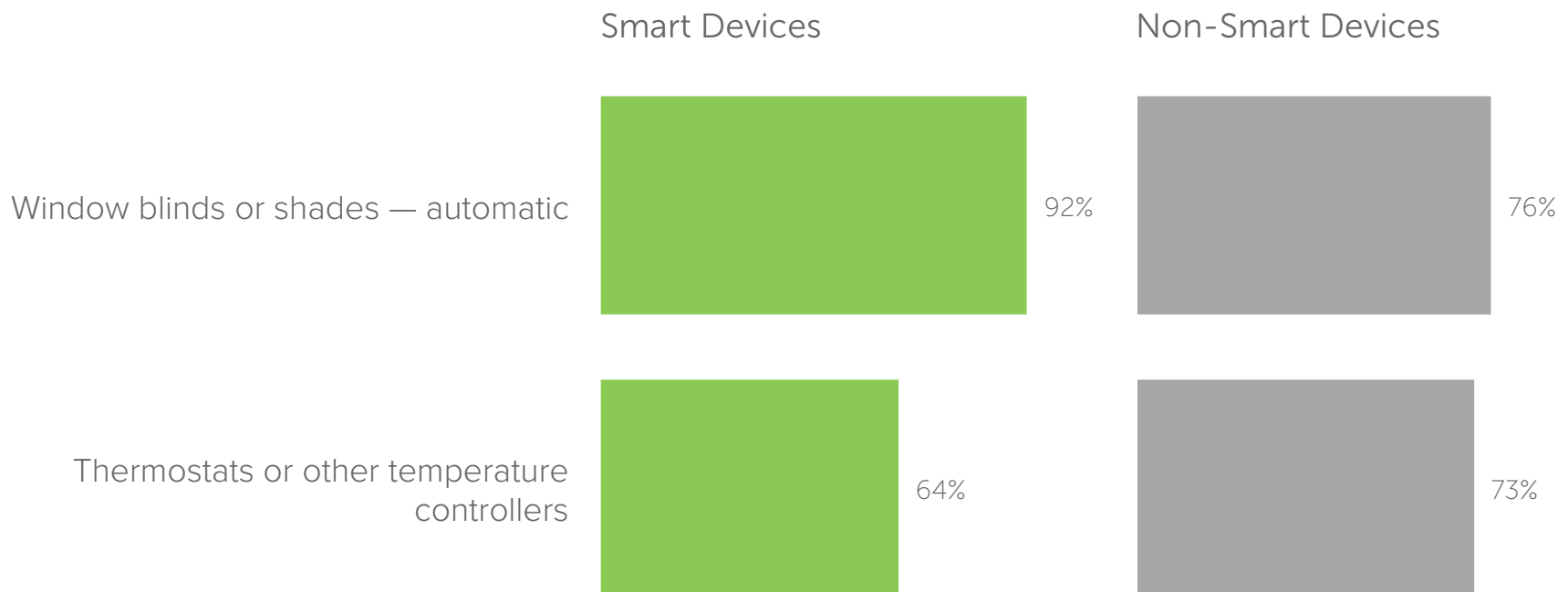
*Systems or devices are defined as “smart” if they have the capability to be monitored and/or controlled from a mobile device and/or computer.

**Percentages reflect proportion of homeowners who are *upgrading entertainment features* as part of their completed, current, or planned renovation.

High-Tech Window Treatments Require Help

Most renovating homeowners upgrading to automatic window blinds or shades go to professional installers for help, especially if smart features are involved (92% vs. 76%, respectively). Homeowners also heavily rely on the help of installers when it comes to thermostats and other temperature controllers, although surprisingly less so for smart devices.

PROFESSIONAL INSTALLATION OF SMART* VS. NON-SMART CLIMATE-CONTROL DEVICES**



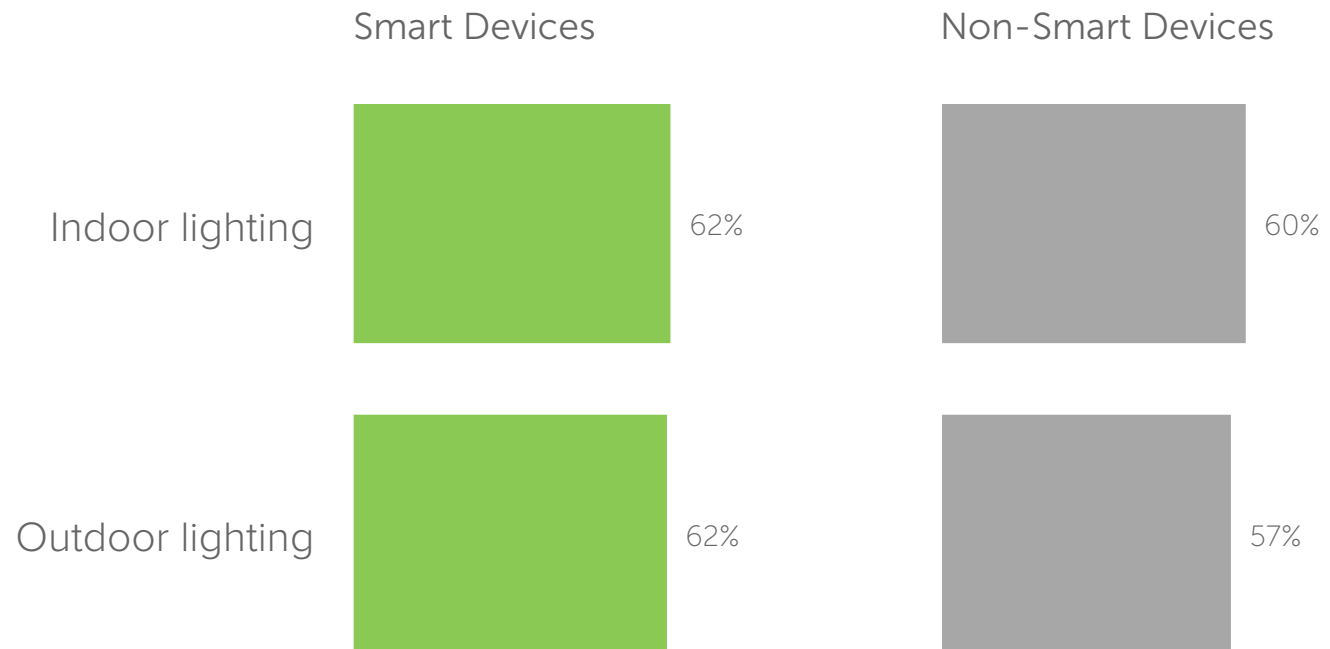
*Systems or devices are defined as “smart” if they have the capability to be monitored and/or controlled from a mobile device and/or computer.

**Percentages reflect proportion of homeowners who are *upgrading climate-control features* as part of their completed, current, or planned renovation.

Leveraging Pros to Light the Way

When it comes to lighting, homeowners rely on professional help irrespective of whether smart technologies are involved.

PROFESSIONAL INSTALLATION OF SMART* VS. NON-SMART LIGHTING DEVICES**



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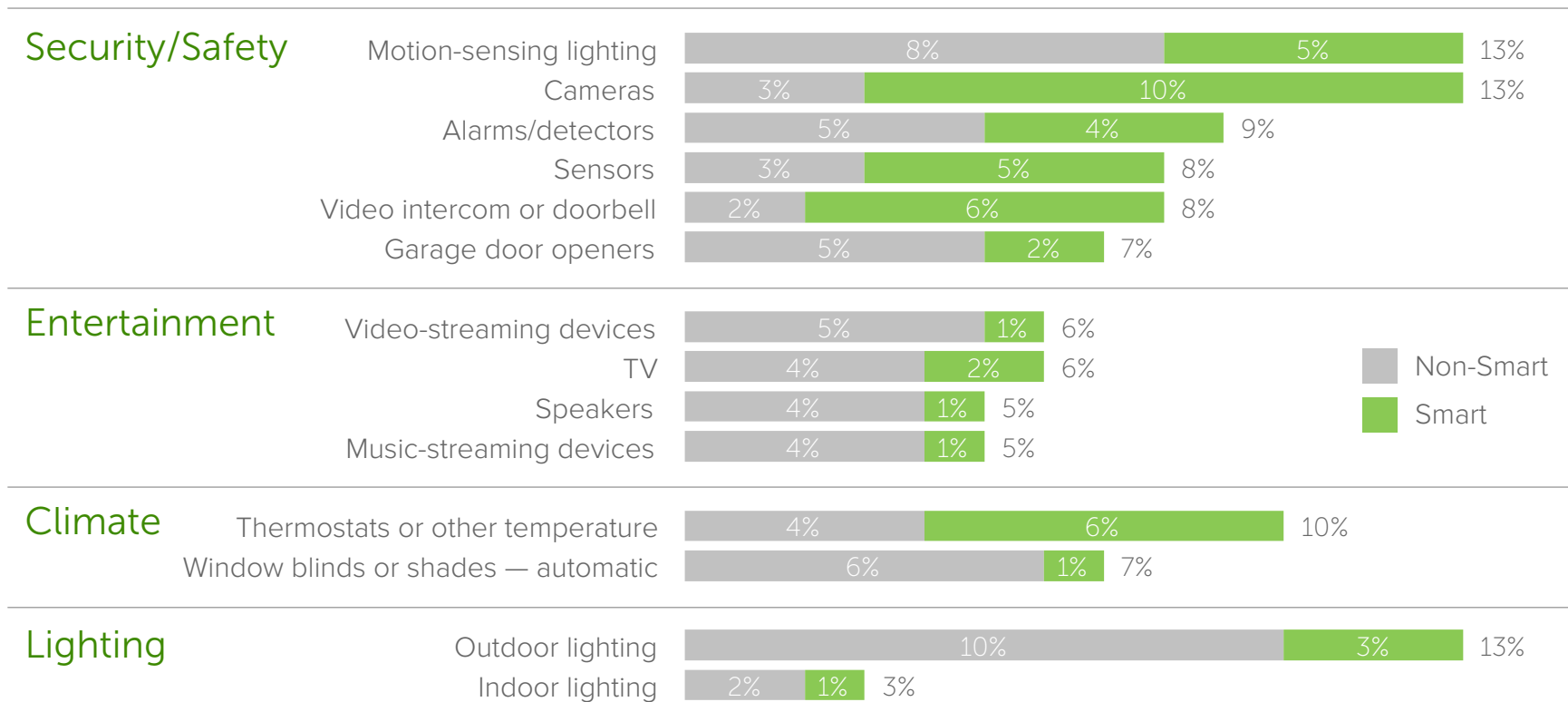
**Percentages reflect proportion of homeowners who are *upgrading lighting features* as part of their completed, current, or planned renovation.

Plans for the Next 5 Years

Lighting, Cameras & Thermostats

Given that a significant share of renovating homeowners are upgrading their home security, entertainment, climate-controls and lighting systems in the course of 2015-2016 renovations, it is not surprising that the share of renovating homeowners intending to make more upgrades to these systems in the next five years is quite low. Lighting, security cameras, and thermostats stand out as the technologies most likely to be upgraded in the next five years, and also most likely to come with smart features.

PLANNED SMART* VS. NON-SMART UPGRADES IN THE NEXT 5 YEARS**



*Systems or devices are defined as “smart” if they have the capability to be monitored and/or controlled from a mobile device and/or computer.

**Percentages reflect proportion of renovating homeowners who did not or are not planning a current upgrade of each system/device listed above.

Methodology

The survey was designed in collaboration with CEDIA* and sent to registered Houzz users in the U.S. and fielded in August 2016. Homeowners who completed a home renovation project in the past 12 months or are planning a home renovation project in the next 12 months shared their plans and progress in our online survey. N=987.

*CEDIA is an international association whose members design, manufacture and install technology for the home.

Appendix A: Challenges

	Smart Upgrades*				Non-Smart Upgrades**			
	Security	Entertainment	Climate-Control	Lighting	Security	Entertainment	Climate-Control	Lighting
Educating myself about available options	40%	40%	36%	38%	33%	37%	32%	23%
Finding the right products/technology	34%	27%	45%	40%	24%	32%	32%	35%
Staying on budget	30%	23%	27%	26%	16%	23%	33%	28%
Staying on schedule	11%	12%	7%	16%	4%	7%	8%	10%
Finding the right professionals/installers	9%	6%	16%	14%	10%	12%	16%	9%
Funding/financing the project	13%	10%	11%	6%	10%	5%	11%	8%
Working with professionals/installers	10%	4%	9%	8%	3%	5%	6%	5%
Difficult to install	5%	4%	4%	8%	2%	5%	4%	4%
Other	2%	3%	2%	4%	1%	1%	1%	2%
None	29%	36%	29%	32%	46%	39%	37%	37%

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**Percentages reflect proportion of homeowners who are upgrading with at least one smart feature (“smart upgrades”) or no smart features (“non-smart upgrades”) in security, entertainment, climate control or lighting as part of their completed, current, or planned renovation.

Appendix B: Links to Resources on Houzz

Houzz is the easiest way for people to find inspiration, get advice, buy products and hire the professionals they need to help turn their ideas into reality.

PHOTOS	FIND PROS	BROWSE PRODUCTS	ARTICLES
Kitchen	Architects and Building Designers	Furniture	Most Popular
Bath	Design-Build firms	Lighting	Houzz Tours
Bedroom	General Contractors	Kitchen & Dining	Kitchen Guides
Living	Home Builders	Bath	More Rooms
Dining	Interior designers	Home Decor	Decorating Guides
Home office	Kitchen & Bath Designers	Bedroom	Bathroom Guides
Baby & kids	Kitchen & Bath Remodelers	Storage & Organization	Remodeling
Entry	Landscape Architects & Landscape Designers	Home Improvement	Architecture
Hall	Landscape Contractors	Outdoor	Landscape Design
Staircase	Pools and Spas	Baby & Kids	Garden Guides
		Housekeeping	Fun Houzz
		Pet Supplies	Life