

LOGGING 2016 TECHNOLOGY STUDY



Findings Include:

- Hotels have a new top challenge impacting technology success
- Budgets as a percent of revenue to hit a record high
- Tech spending in the guestroom giving way to networking
- **PLUS** the top 10 new technology rollouts planned for 2016



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A Busy Year Ahead

Hotels plan record-high technology spending in a push to enable mobility, upgrade existing systems and boost security

If there's a single technology trend for hotels in 2016, it's more. More bandwidth, more data, more mobile engagement, more personalization, more secure transactions and more spend. Hotels are in a race to not just provide technology, but especially to enable it. There's a wrinkle, however, and it's not to be overlooked. In the face of more, more, more, the one thing there's less of is clarity. Hotels struggle to see a clear picture from the vast data they're pulling in. They're challenged to identify solid ROI for their technology projects. Important tools like technology steering committees remain under-utilized. Guest expectations for technology remain difficult to meet.

Despite these challenges, the hotel industry will forge ahead in 2016 with the biggest technology budgets this study has ever captured. The industry continues to do exceptional things with technology innovation: they're rolling out highly-personalized mobile experiences for guests. They're adding unprecedented amounts of bandwidth. They're continuing on the path of cloud migration, and they're upgrading a variety of tried-and-true systems to make use of the latest capabilities.

Contained herein are detailed findings from *Hospitality Technology's 2016 Lodging Technology Study*, produced in partnership with University of Nevada Las Vegas (UNLV). Overall findings reveal that 54% of hotels plan to invest more in technology in 2016 than they did in prior years, and the average hotel technology budget will top six percent of revenue. They've outlined their priorities and a few rise to the top – security, guest room technology and mobility will drive many of this year's investments. Maturity for the use of big data remains low, but there is definite improvement. A comprehensive evaluation of technology adoption also reveals the top 10 new projects on tap for hotels in the coming year. Mobile rollouts dominate the list, making up five of the top ten. Plus, hotels offer their top choices for futuristic technology (turn to page 22 for these last two sets of findings). In all, results from the 2016 Lodging Technology Study are positive, showing an industry with healthy technology growth, despite the lack of clarity for certain projects.

Findings from this year's report were gathered in the third quarter of 2015, and evaluated with the support from Dr. Mehmet Erdem of UNLV Hotel College. This year's sample size includes IT decision-makers with oversight for more than 29,700 hotels. The average length of hospitality-related work experience for a respondent is 18.25 years, and they span all segments including resort, upscale, mid-scale and economy properties. Respondents come from corporate brands, independent ownership, and management groups. This respondent profile offers a meaningful representation of the industry.

It's a busy year ahead for the lodging industry, and technology is at the forefront.

Abigail A. Lorden
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CHAPTER 1:

Hotels to Increase Tech Budgets in 2016

Payment, guestroom and networking solutions drive spending

The U.S. lodging outlook for 2016 is largely a positive one. As 2015 drew to a close, PwC reported that occupancy for the year was at levels not reached since 1981. Despite peak occupancy — and sell-out conditions in many markets — 2015's modest ADR growth defied expectations. In 2016, PwC expects ADR to rebound. Increased confidence amongst hotel operators and brands will push ADR higher, leading to a RevPAR increase of 5.7%.

"Continued strong lodging demand trends in the U.S., peak occupancy levels, coupled with the absence of this year's drag on the U.S. dollar, should give hotel operators confidence to continue to drive more room rate growth in 2016," said PwC's Scott D. Berman, principal and U.S. industry leader.

A strong economic outlook is a boon to technology investments and indeed the results of *HT's 2016 Lodging Technology Study* project that IT spending will hit record highs in 2016. Technology, and in particular a strong digital engagement portfolio, has become a must-have for driving hotel revenue. The traveler's journey starts with convenient booking channels that provide ubiquitous access to reservations, it continues with an on-property experience that enables seamless connectivity, and it ends with post-stay communication that recognizes the guest in a personal way to build loyalty and encourage return visits. The guest lifecycle is powered by technology, and technology will be handsomely funded in 2016.

HOTEL TECH BUDGET BENCHMARKS

In 2016 the "magic number" for hotel technology budgets is 6% of revenue. Lodging IT budgets have been on a consistent growth curve for the past several years, up from 4.9% of revenue in 2014 and 2.6% of revenue in 2013. The 6% average for 2016 aligns with the restaurant industry: CIOs in *HT's 2015 Restaurant Technology Study* estimated an average IT budget that was 5.8% of revenue in 2015.

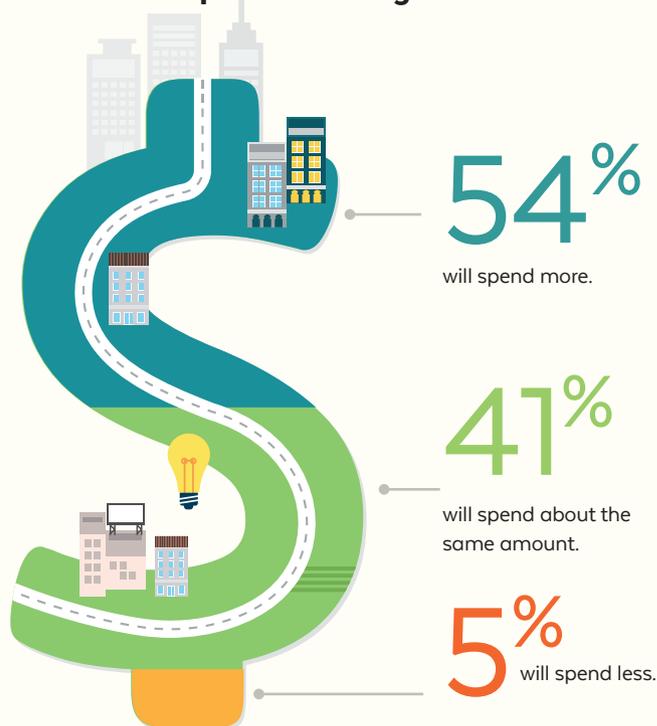
IT as a percentage of revenue can vary dramatically by company and industry, and for one company from year-to-year. Capital-hungry projects drive the budget up, while cloud solutions can reduce costs. Even within the lodging industry, there's a 2-point swing this year based on sub-segment. Among mid-scale hoteliers, where competition is fierce for tech-savvy business travelers, IT budgets are often bigger and are estimated at 7.3% of revenue in 2016. Upscale hotels will invest 6.1% of revenue on IT, followed by luxury at 5.6%, and economy at 5.3%.

To provide additional benchmarking data, we offer a breakdown that shows the percentage of survey respondents that are modest investors (with IT budgets that are two percent of revenue or less), mid-range investors (IT budgets of three to eight percent of revenue), or heavy investors (nine percent of revenue or more). The pie graph "2016 Hotel Technology Budgets as a Percent of Revenue" depicts these breakdowns. Just one year ago, 38% of hotels were modest investors; in 2016, that bucket shrank to 26%. Slightly more than half of all hotels in 2016 will fall into the mid-range of 3 to 8 percent of revenue (55%), and about one in five (or 19%) expect to be heavy investors in 2016. Overall, 54% of hotels told *HT* that they plan spend more on technology in 2016 than they did one year before. Only 5% will spend less and 41% will spend about the same.

GROW, RUN AND TRANSFORM

The magic number provided here is a benchmark. CIOs should proceed with caution before forcing alignment with an average

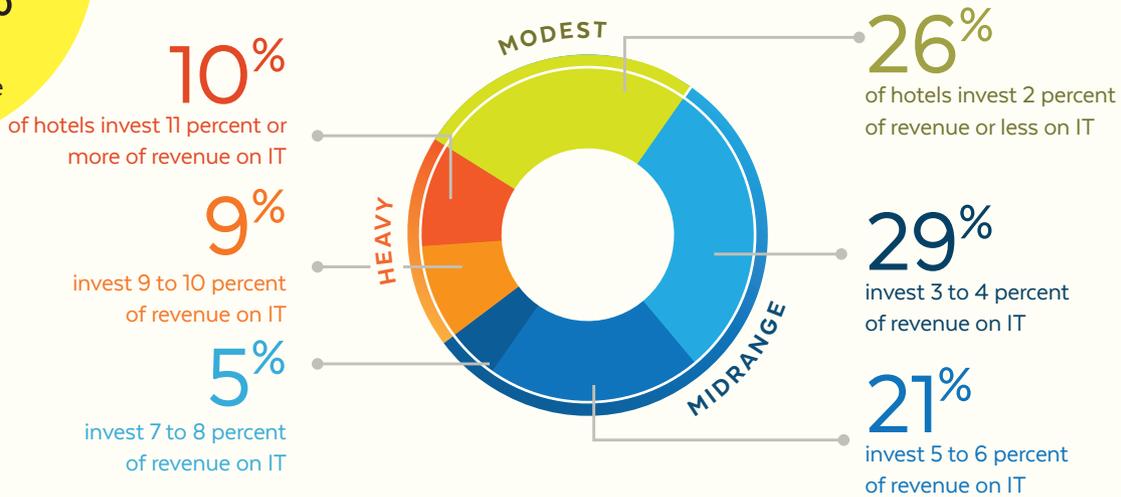
How much will hotels spend on technology in 2016 compared to the year before?



Average Hotel
Tech Budget in 2016

6%
of Revenue

2016 Hotel Technology Budgets as a Percent of Revenue



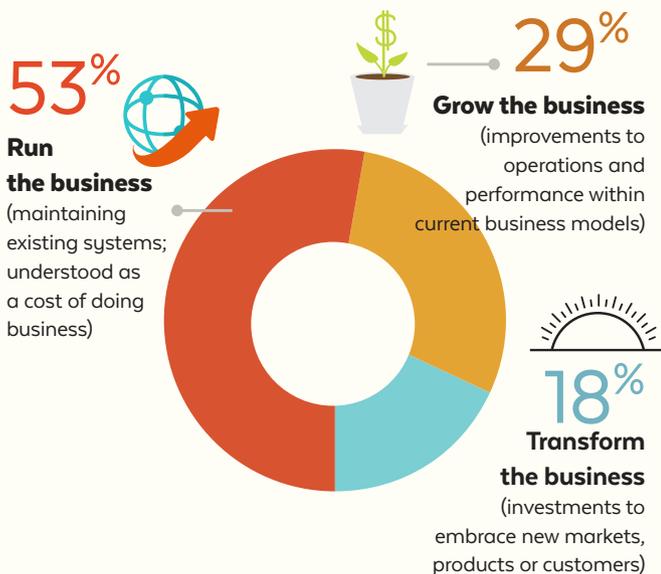
investment level. Large technology budgets might be indicative of industry-leading innovation. They could also be the result of system maintenance with too-high overhead. Conversely, tighter budgets might be the result of an effective migration to hosted systems with lower overhead, leaving more left over for innovation.

For greater context we look at Gartner's "run, grow, transform" model, which asks: what percent of technology is spent

to run the business (think security, compliance, networking and transactions); what percent is spent to grow the business (think about systems that enable marketing and customer loyalty — digital engagement projects could fall here); and what percent is spent to truly transform the business (for example, Apple's entry into the music business via iTunes). The RGT model isn't perfect either, as it can be difficult to categorize some IT projects between either "grow" or "transform." An e-commerce overhaul that one hotel CIO might allocate as transformative, another could consider a tool for growth via customer loyalty. Nonetheless, CIOs are finding the RGT model as a useful way to provide further context to their budget allocations.

Hotel Budget Allocations for Run, Grow & Transform

Gartner's "run, grow, transform" model asks: what percent of technology is spent to run the business; what percent is spent to grow the business; and what percent is spent to truly transform the business.



According to Gartner, companies on average spend 66% of their IT budgets to run the business (maintain IT systems) and they spend the rest on growth or transformation projects. The ideal, according to Gartner, is a 50/50 split, but achieving it isn't easy. Hotels in *HT's Lodging Technology Study* perform better than that average. Hotels say their allocations towards running the business account for 53% of the total IT budget. Another 29% is spent on technologies to grow the business, and 18% is spent on transformative projects.

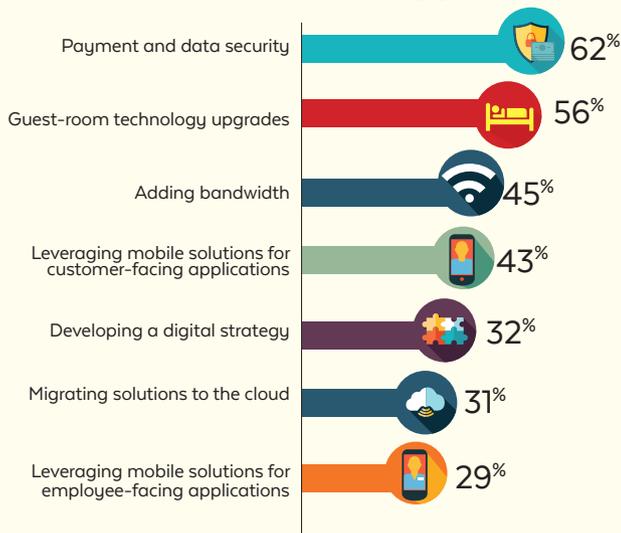
Like most IT organizations, hotel CIOs today find themselves caught between two high-flying objectives — strengthen the business via innovative technologies that engage the customer, and cut costs via systems and processes that lead to greater efficiency. In some cases, one technology stone can take out both birds (e.g. mobile check-in streamlines the front desk while also giving guests control over the check-in process). In the future, particularly with regard to digital projects, Gartner advises CIOs adopt a bimodal approach to technology budgeting and management that allows for both predictable and exploratory work.

Bimodal IT is the practice of managing two separate, coherent modes of IT delivery, one focused on stability and the other

BUDGETS & BUSINESS DRIVERS

2016 LODGING TECHNOLOGY STUDY

Top Objectives for Technology in 2016



on agility. Mode one is traditional and sequential, emphasizing safety and accuracy. Mode two is exploratory and nonlinear, emphasizing agility and speed. In its 2016 CIO survey (which included 2,900 CIOs across 84 countries) Gartner found that almost 40% are on the bimodal journey, with the majority of the remainder planning to follow in the next three years. “The evidence is that building a mature bimodal platform results in much better digital strategy performance,” Gartner said of the findings, adding that one of the worst things a CIO can do is to delay bimodal. Those who are planning to move toward bimodal, but have not taken steps yet, came out worst in terms of digital strategy performance in Gartner’s CIO survey.

HOTEL TECHNOLOGY PRIORITIES IN 2016

For a snapshot of how technology dollars will be spent, *HT*’s survey participants were asked to evaluate a list of objectives and select any/all that are top priorities in 2016 (shown in the above graphic). Security is the top priority, garnering nearly two thirds of the votes this year (62%). Next on the list is guest-room technology upgrades (56%), followed by adding bandwidth (45%). About one third is focused on developing a

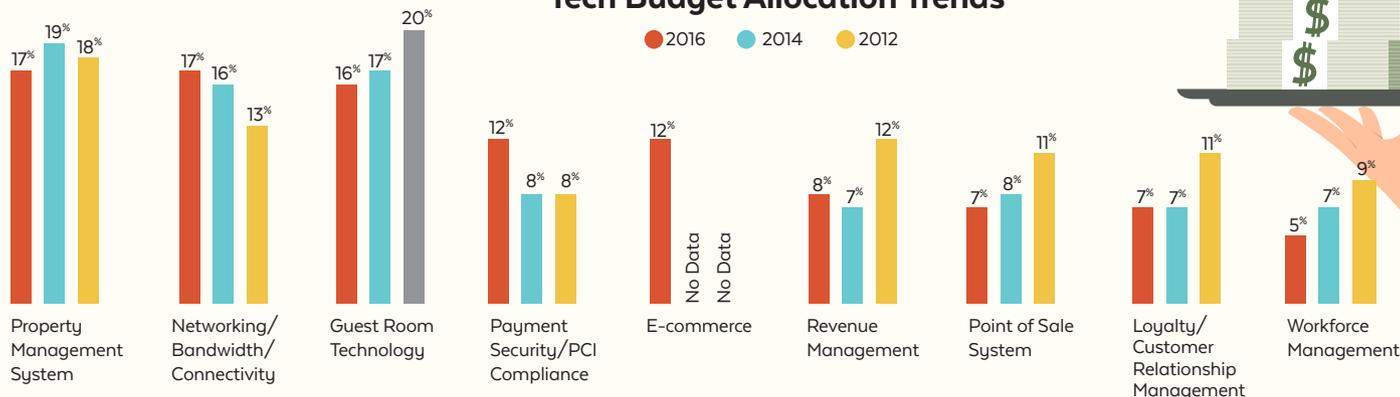
digital strategy (32%), and also on migrating solutions to the cloud (31%). As for mobile deployments, there will be greater focus on customer-facing applications (43%) when compared to employee-facing applications (29%). Hotel CIOs showed an increased digital focus in this year’s study: in 2015, “developing a digital strategy” ranked lowest on the priority list at just 20%. This year, digital strategies saw the largest increase at 12 points. It’s worth noting, also, that across the board all projects increased in priority in this year’s study when compared to last year. This lines up with the projection that hotels will spend more on tech in 2016 — an increase in projects and priorities requires additional financial support.

To complete our picture for budget evaluation, we look at the allocation of dollars across a variety of technology areas (below). The biggest take-away here is stability. For the six years that *HT* has been conducting this survey, the same three technology categories have topped the list: property management, networking/connectivity and guest room technologies. These three categories may swap their first-through-third positioning, but the difference in allocation percentage is always marginal and thus far there’s been no contender to unseat any of the top three. Fourth place is always several percentage points behind, and this year it’s payment security and PCI compliance projects. Workforce management, point-of-sale technology and loyalty/CRM typically receive the smallest allocations.

Looking at historical data, we do see a few notable changes. Guest room technology, while still holding steady in the top three, has been on a downward slope since 2012. Networking, meanwhile, is garnering larger portions of the budget year-over-year. This is indicative of the trend towards enabling guest technology, rather than providing it. Point of sale technology and workforce management solutions are also receiving smaller pieces of the pie. Allocations for payment security saw a notable jump in 2016, which can be attributed to preparations in the face of the EMV liability shift.

In summary, hotel technology budgets are increasing in 2016, with security-focused projects a top priority. The guest-room and networking will both be top areas for IT upgrades; for more insight there, chapter three offers detailed upgrade/roll-out plans. Next up, we examine technology strategy, perceptions and decision making. •

Tech Budget Allocation Trends



CHAPTER 2:

Decision Making & Data Intelligence

Hotels struggle with ROI measurements, but make some progress in use of big data

For the past four years, hotel executives have told HT that keeping pace with rapidly escalating guest expectations is the number one challenge facing their technology teams, even more so than limited IT budgets. In 2016, we see the emergence of an even bigger pain point for hotel CIOs: measuring the return on investment. This year's survey provided respondents with a list of possible challenges and asked them to identify any/all that are significant factors inhibiting technology at their organization. Nearly one in two hoteliers say that measuring the return on investment (ROI) for today's technology solutions has become their number-one challenge.

In last year's report, we measured the prevalence of ROI-related challenges for the first time and it debuted at number two on our list. That prompted our position that methods for measuring ROI are largely outdated for today's digital projects. Traditional financial models that evaluate increased sales or reduced operational expenditures are based largely around the impact of automation — technology's ability to empower people to work better, faster and smarter. Many of today's top technology projects, however, involve customer engagement, loyalty and experience: one third of the hotels

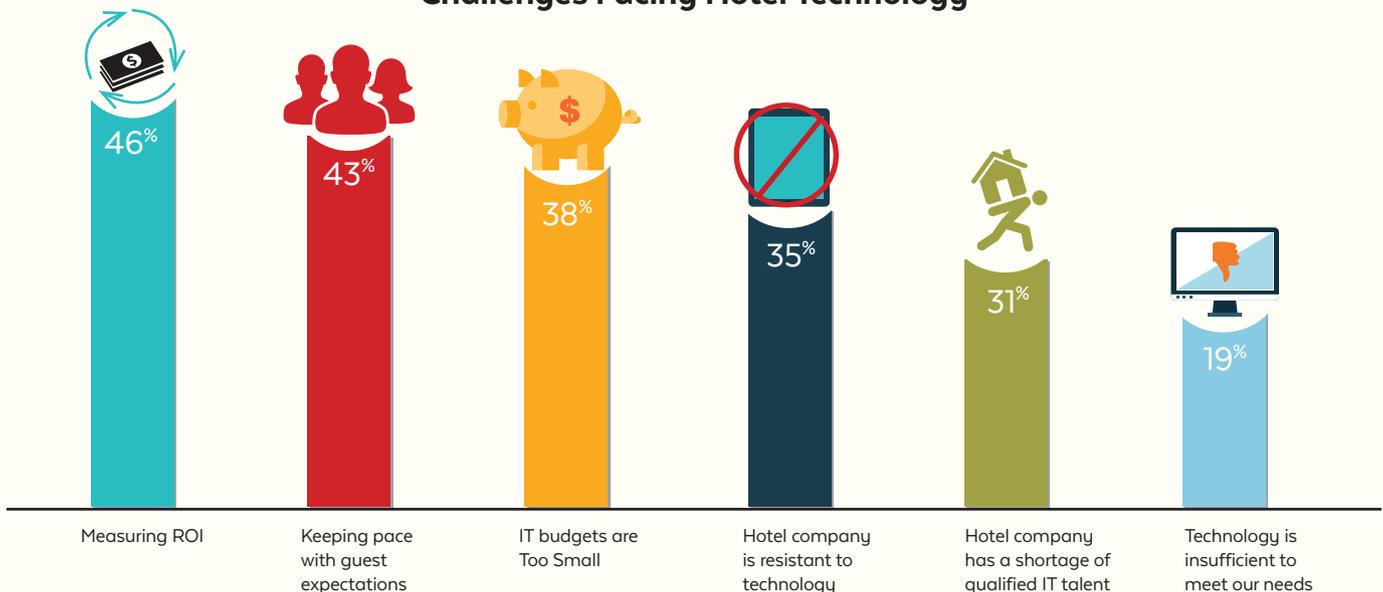
Nearly one in two hoteliers say that measuring the return on investment for today's technology solutions has become their number-one challenge.



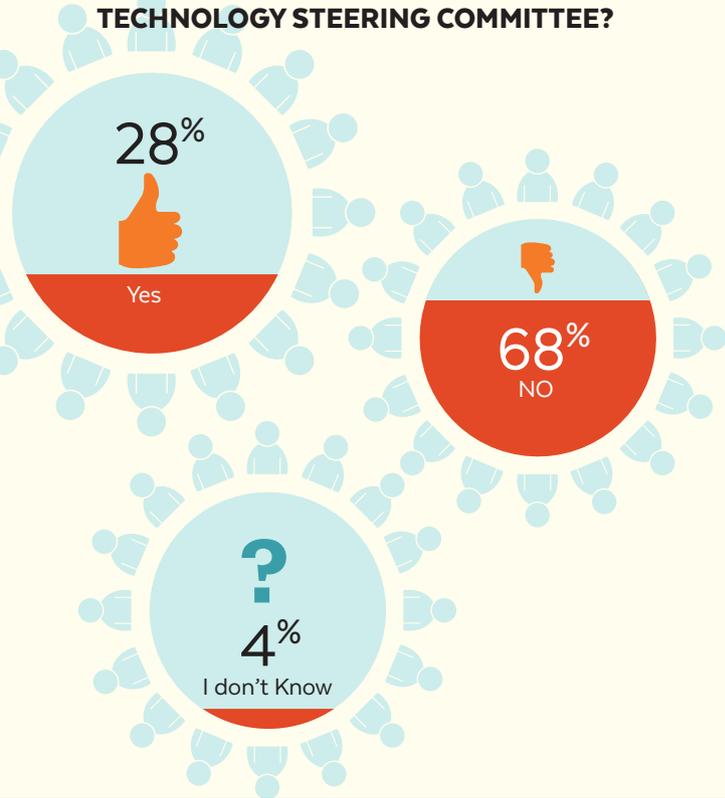
in this survey are developing a digital strategy, and even more (43%) are focused on guest-facing mobile solutions.

Cloud-based technology is another area of investment where ROI remains fuzzy. For example, a survey by *InformationWeek* of technology professionals using public cloud infrastructure for servers and storage were asked if they compare cloud storage costs to their use of an on-premises data center. Only 23% could accurately compare; 51% said they have a ballpark estimate. *InformationWeek* concluded that, "financially, companies struggle to identify the right way to calculate payback; how to measure the cloud's value in speed, cost, and staff focus; and how to assess where cloud use makes the most sense."

Challenges Facing Hotel Technology



DOES YOUR COMPANY USE AN INFORMATION TECHNOLOGY STEERING COMMITTEE?



Rounding out the list of challenges, qualified IT talent is a factor for about a third of the hotels in our study (31%). Slightly more say their company is resistant to technology (35%). The least selected option on our list was “technology itself is insufficient to meet our needs.” This is a meaningful finding: the technology solutions available today are largely able to meet hotels’ needs, but challenges in measuring ROI may well diminish the overall value of those IT investments. Technology suppliers must work with hotel IT executives to overcome this challenge.

One way to improve clarity for ROI could be the use of an information technology steering committee (ITSC). The ITSC is an administrative body that reviews, monitors and prioritizes major IT projects from a cross-functional perspective. Its two key concerns are alignment and ownership. The majority of executives in our survey said their companies don’t use technology steering committees (68%).

ITSCs are small in nature and typically involve different members of the organization, from the CEO, to IT and other business-unit leaders such as digital and e-commerce, all the way through to hotel property managers. The committees are often facilitated by the CIO, but priorities are set and decided upon as a group. To be effective, ITSCs need to have teeth. They should have clear mandates with a written charter, and a genuine ability to influence decisions.

Technology Perceptions

To learn about some of the subjective factors that can influence technology culture at a hotel, survey participants were provided a series of statements and asked to identify which are true for their organization (using an agreement scale that ranged from strongly agree to strongly disagree). Provided here are some interesting findings from that data:

- One in four technology leaders feel that they do not have equal representation in decision-making as their non-IT counterparts. (About half do, and the remaining quarter is neutral).
- As in previous years, more hotels seek to be innovators in business (55%), than innovators via the application of technology (40%). The former will become increasingly difficult to achieve without the latter.
- Cross-functioning teams are budding up in many hotels: 50% of technology staff members are brought in for project management responsibility outside of traditional IT scope. This is particularly valuable in change management scenarios, and will strengthen the position of CIOs and their teams across the organization.
- Hotel CIOs do not feel they’ve earned bragging rights for their technology. Just 35% believe their hotel to be a leader in the use of technology compared to others in their segment.

Beliefs About Innovation

● Disagree ● Neutral ● Agree

My organization seeks to be an innovator in business practices



Our organization seeks to be an innovator in the application of technology

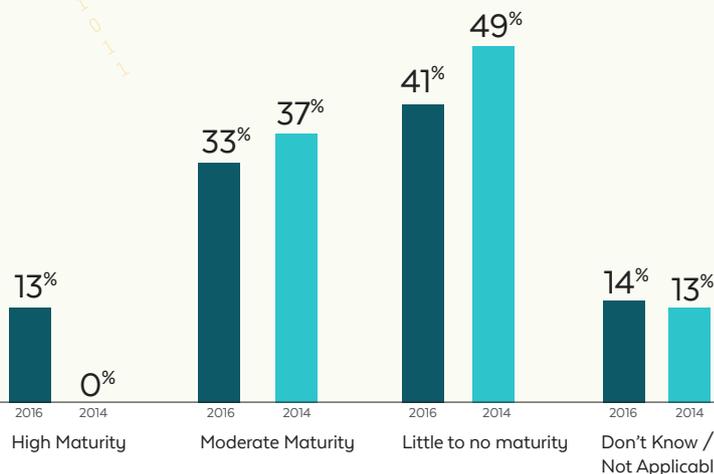


Our organization is a leader in technology compared to others in our market segment



In 2014, not a single hotel reported high maturity. Two years later 13% have hit the high maturity mark.

Hotel Maturity for Using Big Data to Make Decisions



HOTELS WORKING ON DATA ROADBLOCKS

As more devices come online and systems establish greater interoperability, data has become a meaningful component in achieving ROI. As data inputs continue to expand, there is greater demand for superior insights ranging from engagement metrics, to usage data, to consumer feedback. With access to the right data, hotels can make a variety of real-time changes to operations and marketing practices. They can, for example, monitor if a guest is in the room and reduce energy consumption; use revenue management data to optimize room pricing and fill more rooms at higher rates; or leverage data-driven marketing to increase bookings.

This survey tracks industry maturity for the use of big data, and dips into a few specific ways that big data is being used. For the purposes of our survey, we defined big data as information assets that are high in volume, velocity and variety that, when captured, stored or analyzed through advanced techniques, can provide enhanced insight and decision making.

Overall, the hotel industry remains at the early stages of application for big data — most hotels report little to no big data maturity, although there is some improvement. In 2014, not a single hotel reported high maturity. Two years later 13% have hit the high maturity mark. Meanwhile, the group reporting little to no maturity has shrank in size to 41% this year compared to 49% in 2012, although it still represents the largest portion of the industry overall.

A follow-up question was asked of those who do use big data to find out more. Most use it for advanced reporting (26%), and for identifying trends (23%). Just a small amount has achieved predictive analytics (13%). We believe that pre-

Are you prepared to decline a guest an open room on a same-day booking if a revenue optimization system expects a more profitable client to come in later? If not, you should be.



dictive analytics will be a key differentiator in hotels by 2017. Are you prepared to decline a guest an open room on a same-day booking if a revenue optimization system expects a more profitable client to come in later? If not, you should be.

A bright spot in data intelligence exists in the industry's use of revenue management. About 60% of hotels in *HT*'s survey use a revenue management system. This technology is on track to create substantial competitive advantage for optimizing occupancy and rates. Starwood Hotels & Resorts invested in a proprietary revenue management system that aims to optimize occupancy. Their system is integrated into CRS, group systems, and indirectly into the PMS. "We've taken our own data and married that with external data, such as competitive and area information that might skew or grow occupancy, and then used those data elements to optimize room rates," Starwood CIO Martha Pouter told *HT* in an October 2015 cover story. "Those [hotels] that don't leverage their data will perish," Poulter stressed. •

CHAPTER 3:

Tracking Technology Adoption in 2016

Hotels focus on system upgrades, payments and mobility

With record-level spending expected for hotel IT in 2016, it's prudent to understand which technologies will likely see the greatest roll-out activity. This study tracks current and planned adoption for a variety of technologies. One trend evident from this year's data is that hotels will be in upgrade mode for 2016 – many of the systems that already have high current adoption rates are also on schedule for an upgrade in the year ahead.

Survey takers were provided with several lists of technologies and asked to indicate if they currently use a technology, plan to upgrade an existing technology, or have new roll-outs on the docket. We queried executives in this fashion across several major categories: customer-facing technology; in-room technology; and property systems (including PMS, CRS, and others). Note, also, that security-related technologies were examined in a different format and will be addressed separately.

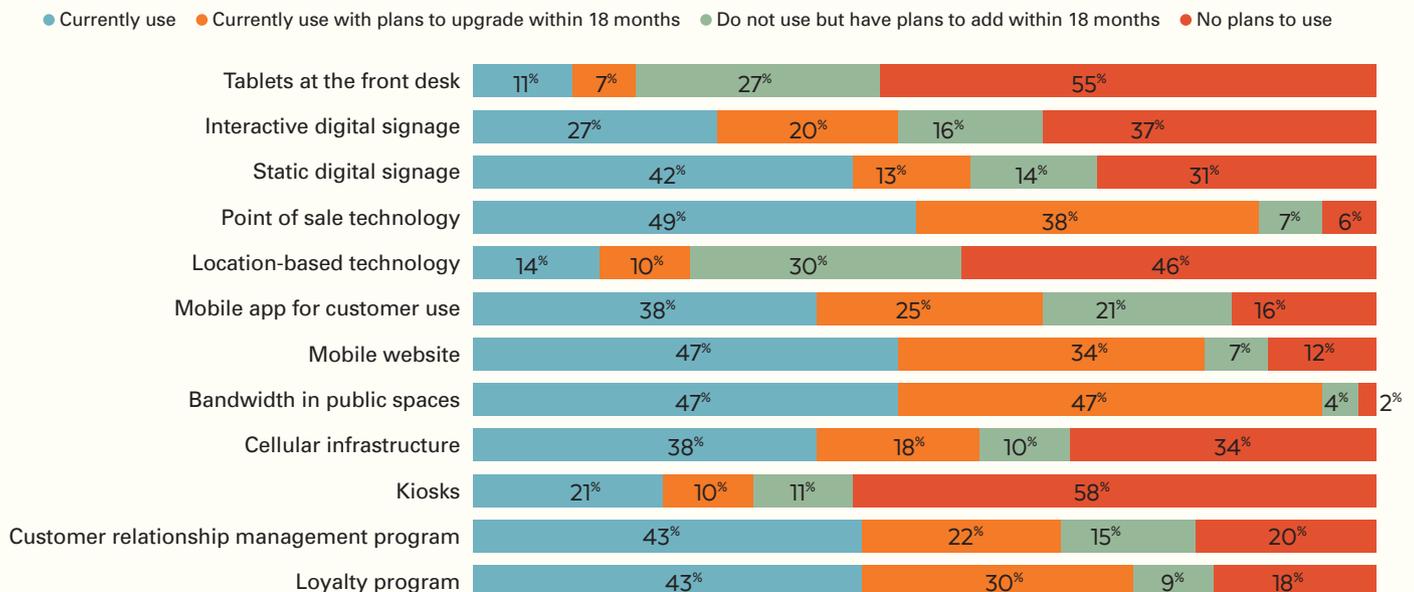
To provide context to adoption rates, we evaluate them using the Technology Adoption Scale created by EKN Research, a division of Edgell Communications and sister organization to *Hospitality Technology*. The EKN Technology Adoption Scale

breaks down as follows: early adoption (less than 15% of the market has the technology installed); gaining momentum (15% to 50% install base), becoming standard (51% to 75% install base), mature (75% to 85% install base) and saturated (with an installation base that's above 85%).

CUSTOMER ENGAGEMENT & GUESTROOM TECHNOLOGIES

The first area of investigation is customer engagement technologies. A list of 12 technologies was curated for evaluation based on prior years' research findings (technologies that were "gaining momentum" for example) plus general industry trends. They all share in common an impact on customer engagement. The list provided here also includes a variety of traditional systems where hotels interface with customers, such as loyalty programs, point of sale systems, and customer relationship management programs. These established technologies enjoy high rates for current use. They also provide a benchmark against which we can measure newer tactics such as location-based marketing and tablets for check-in.

Customer Facing Tech Rollouts



TECHNOLOGY INVESTMENTS

2016 LODGING TECHNOLOGY STUDY

On average, POS, loyalty and CRM have high current installation rates that range from 65% to 87%. Interestingly, mobile websites have also hit that level of market saturation, and are currently used by 81% of hotels. Bandwidth in public spaces (lobbies, etc.) has the highest installation of all the technologies measured in this section at 94%. All these same technologies – loyalty, bandwidth in public spaces, mobile websites and point of sale systems — will also get upgrades in 2016. From these findings, we believe that hotels are evaluating these technologies for better functionality, likely to add mobile access for guests, and data integration for better insight.

Elsewhere, several technologies rank high on the list of new rollouts: 27% of hotels plan to add tablets at the front desk — this is in addition to the 18% of hotels that already have the technology. Location-based technology is also a big mover on our list: just 24% of hotels currently have the technology, but another 30% have new rollouts planned. At the low end of the activity spectrum, kiosks remain a lesser-used technology. Only 31% of hotels have them currently, and 11% plan to add them.

The same adoption scale was applied to a list of 13 guest room technologies. Here again the technologies with the highest current installation rates — bandwidth, wireless Internet access, flat screen TVs, and HD content — are also due for an upgrade in the year ahead. In terms of new rollouts, mobile key technology (also called keyless entry, characterized by guest room access via a guest's mobile device) will see the most activity. Room control devices and energy management systems come in second and third on the list of new technology projects. This data also suggests that hotels are moving away from providing iPads as an in-room amenity. Rather than provide the technology, the pattern is to enable it. Curve televisions are also in their infancy, and it remains to be seen if hotels will embrace this technology.

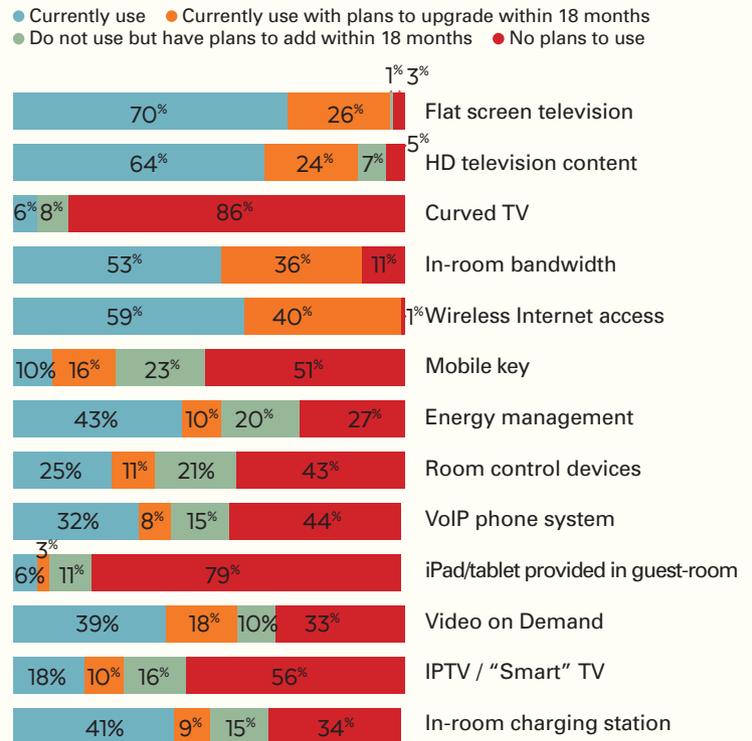
For in-room Internet access, the industry is moving away from a flat fee, and even entirely free-to-guest, in favor of a tiered model. In 2016, 44% of hotels will use some form of tiered access. The most popular approach here is to offer free access for lower bandwidth and charge for higher levels — 40% of the hotels in our survey take this approach, an increase over the 24% that did so one year ago. About half of hotels (52%) will offer flat connectivity (no tiers) at no additional charge in 2016, but we see a decline from just one year ago when nearly 60% used this model.

PROPERTY, PAYMENT & CLOUD

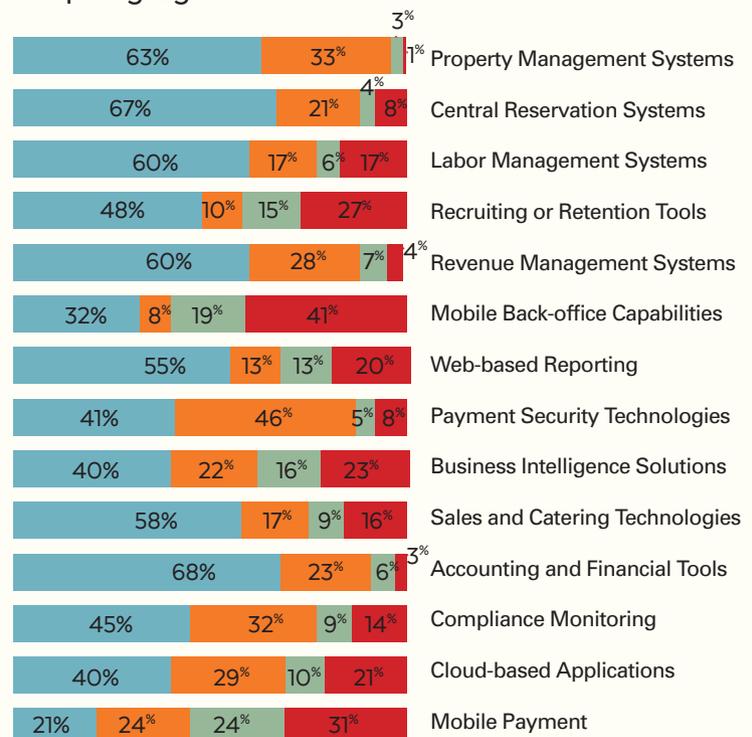
Several major property systems are on tap for upgrades in 2016. Almost half of all hotels plan to upgrade their payment technology (46%), and a third has enhancements planned for compliance monitoring solutions. Property management systems will also see upgrades in 2016, with 33% of hotels planning an update to their existing system. In terms of new

Tech Rollouts

In the Guest Room



Property Systems

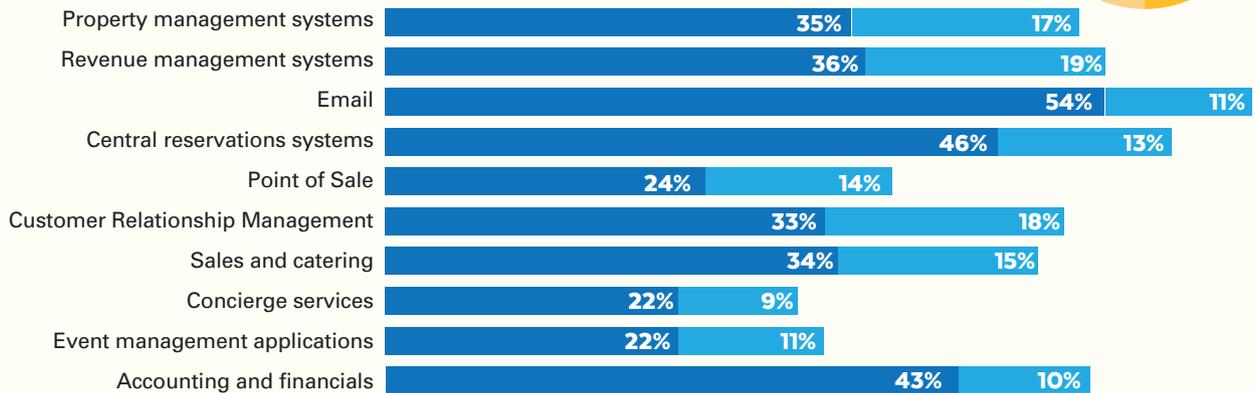




What's Running in the Cloud?

● Currently Running in Cloud

● Planning a Cloud Migration



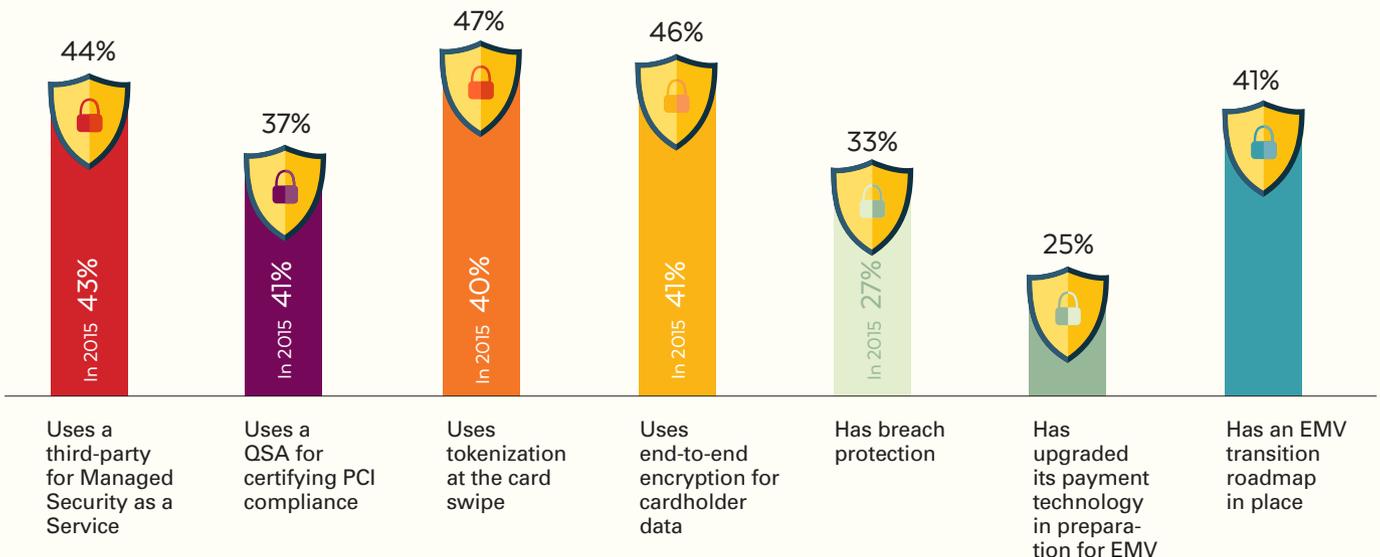
technology projects, mobile payment will see the most activity, with 24% planning a new rollout.

Nearly 70% of hotels tell us they are embracing some form of cloud-based solutions. Of those who have a cloud-based system, email is the most widely adopted (54%), followed by central reservations systems (46%), and accounting and financial (43%) systems. New migrations will most likely occur for revenue management, customer relationship management and property management systems.

Hotels identified payment and data security as their top objective for technology investments in 2016. Nearly two-third of the executives in this study said it would drive spending. From the data already explored, we know that nearly half of all

hotels will upgrade payment technology in 2016. To find out more about the practices in place within the industry, respondents were provided a list of nine possible statements about the use of technology and asked to identify which are in place at their hotel. Here's what we discovered: hotels have made notable upgrades to their payment infrastructure. In all the categories we measured except for one, usage is on the rise. Only the use of a QSA for PCI compliance certification saw a drop from the year prior. More hotels are using tokenization technology compared to one year ago (47% up from 40%); more hotels are investing in breach protection (33% up from 27%); and more hotels have deployed end-to-end encryption (46% up from 41% one year ago). At the time this data was collect-

Hotel Payment Security Practices in Use in 2016



TECHNOLOGY INVESTMENTS

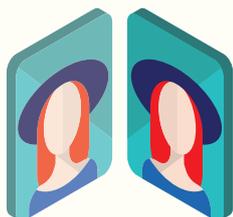
2016 LODGING TECHNOLOGY STUDY

Top Choices for Futuristic Technologies



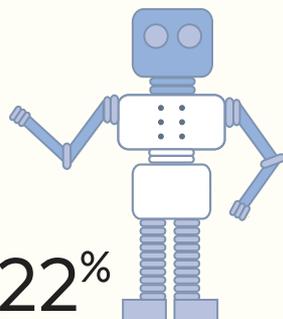
36%

Gesture controlled interactive walls



32%

Bathroom mirrors functioning as an interactive display



22%

Robotics (robot concierge, robot butler, etc.)



22%

Electro-responsive fibers in bedding/pillows monitor stress levels and sleep patterns



14%

Personal holograms to serve as on-property guides

ed, the industry was facing down the EMV deadline and 25% had already made necessary upgrades. Another 41% have a transition plan in place.

Finally, looking ahead, hotels were asked to set aside current pressure and planned rollouts and think about “what if” scenarios for technology. They were provided a list of possible technologies, and asked if they see a likely application for its use within hotels. What if a robotic concierge were to greet guests upon arrival (22% see this as likely). What if holograms could be used as a personal guide to each hotel guest (14% think they’ll see this one play out). Their top choices for future technology are not so far off and rely on interactive displays. More than a third says they see hotels making use of fully interactive walls, where the wall surface

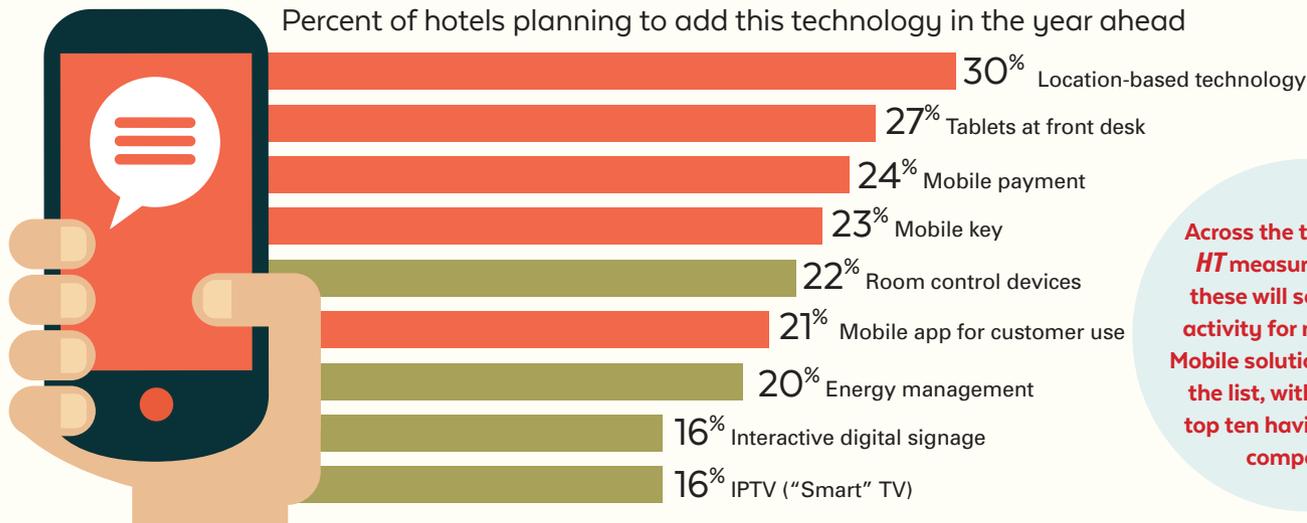
is a gesture controlled monitor. Nearly as many expect there will be innovation in bathrooms, where the entire mirror functions as an interactive display.

When asked about Internet of Things, most said there’s a potential for its use in the hospitality industry, but any real traction is at least one year away. Ten percent say it’s already here, and 15% say, “don’t believe the hype.”

What’s not hype is the level of technology spending taking place within hotels across all segments of the industry. Mobile will be a dominant factor in new 2016 rollouts. We examined the customer engagement, in-room and property technology projects that hotels will deploy in the year ahead, and six of the top ten have some mobile component. While security may be keeping hotel CIOs up at night, mobility will be leading them into a new day. •

Top 10 New Tech Rollouts

Percent of hotels planning to add this technology in the year ahead



Across the technologies HT measured in 2016, these will see the most activity for new rollouts. Mobile solutions dominate the list, with half of the top ten having a mobile component.



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