



# Hotel technology 2.0

New advances in technology continue to alter the relationship between hotels and guests. User-friendly and powerful smartphones and tablets are changing travelers' online preferences and habits, redefining how they research, plan and book a trip. Empowered with more knowledge and social media, today's hotel guest is pushing hotels for improved products and services in their travel experience. From an ownership standpoint, advances in data analytics are transforming the hospitality industry with the potential to enhance a hotel's financial performance and offer detailed insight into customer preferences. As the use of mobile devices, social media and advanced analytics continues to proliferate, and as online distribution channels become more accessible, technology has created new opportunities for hotels to drive operating efficiencies and engage with guests, from booking to checkout.<sup>49</sup>

49. "Conrad Hotels empowers travelers with end-to-end mobile customer experience," *Mobile Marketer*, [www.mobilemarketer.com/cms/news/database-crm/18296.html](http://www.mobilemarketer.com/cms/news/database-crm/18296.html), accessed October 2014.

We'll begin with today's traveler. According to a 2013 global survey by TripAdvisor, 87% of travelers use a smartphone and 44% use a tablet while traveling. As such, hotels are rethinking all aspects of the hotel experience, with a focus on accommodating these devices in guestrooms, meeting spaces, lobbies and front desks.<sup>50</sup>

For example, one international hotel brand has taken a more proactive approach by partnering with a leading engineering and technology university to redesign the future hotel experience and find innovative ways of making public areas more exciting, user-friendly and relevant to the technology needs of today's traveler.<sup>51</sup> In Silicon Valley, one major brand recently launched a robot butler equipped with a tablet to facilitate interaction between guests and staff. For instance, a guest may call the front desk to request a forgotten toiletry; the hotel staff then inputs the guest's room number into the robot's tablet interface and places the toiletry on the robot, which delivers the item directly to the room.<sup>52</sup>

50. "Social Media, Smartphones & Tablets Now Essential Travel Tools for U.S. Travelers," *TripAdvisor*, <http://ir.tripadvisor.com/releasedetail.cfm?releaseid=808058>, accessed October 2014; "Mobile/Smartphones," *European Travel Commission*, <http://etc-digital.org/digital-trends/mobile-devices/mobile-smartphones/regional-overview/north-america/>, accessed October 2014.  
51. "The Future Hotel Experience," *MIT Mobile Experience Laboratory*, <http://mobile.mit.edu/projects/the-future-hotel-experience>, accessed October 2014.  
52. "Starwood Introduces Robotic Butlers At Aloft Hotel In Cupertino," *TechCrunch*, <http://techcrunch.com/2014/08/13/starwood-introduces-robotic-butlers-at-aloft-hotel-in-palo-alto>, accessed August 2014.

According to a 2014 US survey by USamp and Smith Micro Software, more than 60% of travelers prefer to purchase and reserve hotel guest services using mobile devices rather than face-to-face with hotel staff.<sup>53</sup> As such, hotel companies are turning to products and applications that empower guests to browse inventory, book amenities, complete reservations and purchase a variety of services (such as room service) via mobile devices to drive engagement and increase revenue-generating opportunities.<sup>54</sup> Other mobile innovations include mobile keys, check-in kiosks and mobile-enabled property management systems, allowing hotel employees to interact more with guests.

Moreover, recent advances in wearable technology, such as smart watches and glasses, are expected to revolutionize the way customers access the web and contribute personal content. For example, hotel reviews that feature video instead of just text will place even more emphasis on hotel reputation and performance.

53. "Majority of Consumers Prefer to Purchase and Reserve Hotel Services Using Mobile Devices," *Smith Micro*, [www.smithmicro.com/company/news-room/press-releases/2014/06/23/majority-of-consumers-prefer-to-purchase-and-reserve-hotel-services-using-mobile-devices](http://www.smithmicro.com/company/news-room/press-releases/2014/06/23/majority-of-consumers-prefer-to-purchase-and-reserve-hotel-services-using-mobile-devices), accessed October 2014.  
54. "10 Hospitality Technology Trends You Need To Know About," *Smart Brief*, [www2.smartbrief.com/hosted/ad2187/Hospitality\\_Trends\\_2013.pdf](http://www2.smartbrief.com/hosted/ad2187/Hospitality_Trends_2013.pdf), accessed October 2014.



From an ownership standpoint, new technology has also impacted how guests are acquired in the discovery and booking phases, as travelers are increasingly looking online to book hotel rooms and customer acquisition costs continue to rise. According to 2014 research by eTrack, eMarketer and Alexa.com, 57% of all travel reservations are taking place online, while internet travel booking revenue has grown by more than 73% over the past five years.<sup>55</sup> At the same time, the competition to gain control of the distribution channel has intensified.<sup>56</sup> Through acquisitions of property management and digital marketing platforms, online travel agents (OTAs) are providing additional services to encourage hoteliers to distribute rooms on their sites.<sup>57</sup>

On the other hand, hotel brands seek to drive bookings to their own proprietary websites by leveraging the power of loyalty programs and streamlining the booking experience. In 2014, a major international hotel company stated that it booked over 50% of its reservations through its direct central reservations system due to its strong rewards program.<sup>58</sup> Other innovative online reservation platforms can also provide hotels with a source of additional revenue by allowing non-hotel guests to book meeting space on an hourly basis.<sup>59</sup>

Leading hotel companies are also leveraging advances in data analytics and artificial intelligence (AI) technologies to increase online reservations, improve the return on advertising spend (ROAS), better understand guest preferences and build stronger customer relationships.<sup>60</sup> In 2014, one international hotel company reported an impressive ROAS increase of approximately 2,100% by deploying a new online advertising platform, which combined data analytics with AI technologies.<sup>61</sup> AI technologies utilize powerful algorithms to determine the most appropriate media to focus advertising spend. Other big data and AI applications focus on enhancing a hotel's revenue management system by dynamically changing room rates based on a number of changing variables, including the hotel's website activity or weather conditions.<sup>62</sup>

Hotels must holistically embrace social, mobile and analytics to drive business improvements, enhance hotel guests' experiences and deliver results. A hotelier's ability to keep up with rapid technology changes and embrace the latest technology tools will differentiate successful hotel organizations going forward.

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55. "Internet Travel Hotel Booking Statistics," Statistic Brain, [www.statisticbrain.com/internet-travel-hotel-booking-statistics](http://www.statisticbrain.com/internet-travel-hotel-booking-statistics), accessed October 2014.

56. "Hospitality Asset Managers Association (HAMA) Study Documents Growing Revenue Acquisition Costs Outpacing Hotel Revenue Growth," HospitalityNet, [www.hospitalitynet.org/news/154000320/4066627.html](http://www.hospitalitynet.org/news/154000320/4066627.html), accessed October 2014.

57. "Evolution in Electronic Distribution: Effects on Hotels and Intermediaries," Cornell University School of Hotel Administration, [www.hotelschool.cornell.edu/research/chr/pubs/reports/abstract-13606.html](http://www.hotelschool.cornell.edu/research/chr/pubs/reports/abstract-13606.html), accessed October 2014.

58. "5 Tech Trends That Will Shape Hospitality," Hotel News Now, [www.hotelnewsnow.com/article/14016/5-tech-trends-that-will-shape-hospitality](http://www.hotelnewsnow.com/article/14016/5-tech-trends-that-will-shape-hospitality), accessed October 2014.

59. "Office Space, by the Hour," The New York Times, [www.nytimes.com/2013/02/19/business/hotels-carve-out-work-spaces-rented-hourly.html](http://www.nytimes.com/2013/02/19/business/hotels-carve-out-work-spaces-rented-hourly.html), accessed October 2014.

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60. "Major global study reveals how big data will transform the hospitality industry," Amadeus, [www.amadeus.com/hotels/newsrepository/articles/major-global-study-reveals-how-big-data-will-transform-hospitality-industry](http://www.amadeus.com/hotels/newsrepository/articles/major-global-study-reveals-how-big-data-will-transform-hospitality-industry), accessed October 2014.

61. "Hotel chain utilizes new digital advertising platform to great success," .Rising, [www.dotrising.com/2014/01/13/hotel-chain-utilises-new-digital-advertising-platform-to-great-success](http://www.dotrising.com/2014/01/13/hotel-chain-utilises-new-digital-advertising-platform-to-great-success), accessed October 2014.

62. "Duetto Raises \$21M Led By Accel To Equip Hotels With Big Data Surge Pricing," TechCrunch, <http://techcrunch.com/2014/07/09/duetto>, accessed October 2014.