



Robots, Chatbots, Biometrics and Augmented Reality – Coming Soon to a Hotel Near You

As the saying goes, 'the times they are a-changin.'

According to industry experts, by 2025 the use of facial recognition, biometrics and virtual reality across hotels will be mainstream, and 73% of traditional manual activities will be automated. Scotland, with its burgeoning hotel sector and established technology scene for app developers, robotics experts, AR, VR and ground-breaking new mobile technology, is well-placed to lead the charge in developing and implementing the hotel sector's next generation AI.



The Robot Invasion – where science fiction meets reality

In 2015 the Henn-na Hotel in Nagasaki, Japan made headlines when it opened the world's first AI-styled hotel staffed entirely by robots. Check-in was manned by a lifelike female android and a less lifelike dinasaur. A foot-high mechanical "concierge" explained breakfast times, while robot "porters" carried residents' luggage. Visitors accessed their rooms using facial recognition software, and on entering were greeted by "techy" additions like individual body temperature adjusted air con and "Churi," a cute electronic creature designed to manage the lights, offer weather forecasts and program wake-up calls.

On the other side of the Pacific, well-known brands like Marriott (with its mini robots, "Leo" and "Cleo") and Hilton (with its IBM Watson-powered mechanical concierge, "Connie") have been investing in similarly transformative AI. Closer to home in London, "chatbots" – a technological tool which allows the hotel to chat in real time with customers who visit their website – are already de rigueur; next generation 'always on' and connected visitors to the Edwardian Hotels have been interacting with real-time virtual assistant chatbots via texts for years, using smartphones to order room services, enquire about babysitting services and seek advice on local restaurants and attractions.



But it's not all just about the bots...

Hotels across the globe are hyper-personalising guests' experiences using the "Internet of Things" and intelligent hotel systems to create smart rooms that include voice-activated virtual assistants, room amenities controls (lighting, TV, temperature, music), personalized activity suggestions, AI-enabled housekeeping services and IoT interconnected devices. Signatures are being replaced by facial recognition software and "augmented reality" (AR) – another AI "buzz term" – is helping hotels obliterate linguistic barriers by enabling single-language employees to converse effortlessly with international guests using AR headsets that provide real-time translation.



Gen X and Y Hotels in Scotland

A recent PwC report identified Glasgow as the current hot spot for new hotel growth - advancing eight times faster than the UK average – with Edinburgh, Dundee and Aberdeen close behind. And the trend shows no sign of easing. But while Scotland's reputation for tech investment, tech creation and tech start-ups is at an all-time high, AI advancements in its hotel industry have been progressing at a more leisurely pace. Examples include Edinburgh's Haymarket Hub Hotel, marketed as Scotland's first smartphone hotel; and Merchant City, Glasgow's Moxy Hotel, the Marriot's tech-savvy, millennial-focused accommodation with floor-to-ceiling art walls, furiously fast wi-fi, photo booth elevators and dial-up bedtime stories. Other future Scottish hotel offerings include Virgin's first UK hotel – set to open in Edinburgh in 2020 with tech-savvy features like room apps that enable guests to order room service, control the room's climate, make dinner reservations, valet their cars and live chat with the concierge and other guests – and W Edinburgh, the hipster millennial favourite brand renowned for its futuristic lobbies and edgy interior, forecast to make its Scottish debut in 2021.



But what about the robots?

In September 2018 a team of hotel market experts and company specialists hosted an industry event in Edinburgh where AI, machine learning and chatbots were singled out as the sector's next 'big thing'. To meet modern Instagram travellers' demands for personalised service and information that is immediate and easy to access with real time data at their fingertips, hotels need to keep investing in technology.

And Scotland's Heriot Watt University may have one of the answers. In December 2017 Heriot Watt beat some impressive competition from around the globe to make the final of Amazon's Alexa Prize, aimed at advancing conversational AIs. The competition focused on creating an AI 'socialbot' that could accurately and engagingly converse with humans on popular topics for 20 minutes. For their entry, the Heriot-Watt team – appropriately titled 'What's up Bot' - developed "Alana," a highly sophisticated software capable of understand and responding to human conversation.

Although it remains to be seen whether Alana will deliver robotic solutions for Scotland's hospitality's customer-service roles, other AI technologies and integrated IoT systems remain poised to revolutionise the hotel industry. And with Scottish hotel figures soaring – Lonely Planet has recently listed the Highlands a must-visit destination – its technology community continuing to grow, Scotland is well-poised to lead the charge in AI innovations in the hotel sector.

Change, it seems, is here to stay.

Contact



Cynthia Johnson
Of Counsel
T +44 131 200 7343
E cynthia.johnson@cms-cmno.com